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JON RITMAN AND BERNIE DRUMMOND DISCUSS THE IMPACT OF THEIR ISOMETRIC CLASSIC

SUPER MARIO WORLD 2 YOSHI'S ISLAND

SHIGEFUMI HINO AND TAKASHI TEZUKA ON THEIR SENSATIONAL SNES SEQUEL

MY ARCADE® MINI-CAB OFFER

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TENCHU: STEALTH ASSASSINS

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THE RETROBATES

WHAT'S YOUR FAVOURITE OCEAN SOFTWARE GAME?

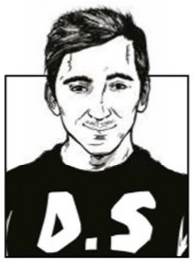
DARRAN JONES

It's probably *Head Over Heels*. I've always enjoyed isometric games, but *Head Over Heels* blew me away.

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:
Panzer Dragoon Saga

Favourite game of all time:
Strider



DREW SLEEP

Man, it's not my type of game at all, but you can't help but admire Bernie Drummond and Jon Ritman's work on *Batman*.

Expertise:
Team **Retro Gamer**'s resident GM

Currently playing:
Final Fantasy IX

Favourite game of all time:
Final Fantasy VIII

NICK THORPE

The GX4000 wasn't great hardware, but Ocean did good work with it. *Pang*'s great but has better versions elsewhere, so my pick of the bunch is *Navy Seals*.

Expertise:
Owning five Master Systems (I sold two)

Currently playing:
DiRT: Showdown

Favourite game of all time:
Sonic The Hedgehog

WOZ BROWN

Being a Speccy owner in the late Eighties means it's a toss up between *RoboCop* and *Batman: The Movie* for me. Murphy's law wins this time.

Expertise:
Running for connecting trains

Currently playing:
Tetris 99

Favourite game of all time:
The Legend of Zelda: Ocarina of Time

ADAM BARNES

Though I've a soft spot for *The Flintstones* SNES game, I'd probably have to point to *RoboCop 3* as being my favourite. I remember renting on a weekly basis, even after I had finished it.

Expertise:
Being pretentious about coffee

Currently playing:
Slay The Spire

Favourite game of all time:
Baldur's Gate

HARETH AL BUSTANI

WWF WrestleMania is a fun foray into the world of wrestling, featuring some of the mechanics that would later become hallmarks of the genre.

Expertise:
Juggling obscure games, words and guitar and seeing where it all lands

Currently playing:
Yakuza 0

Favourite game of all time:
The Secret Of Monkey Island

PAUL DRURY

I remember being very impressed by Ocean's first arcade port, *Hunchback* – and I like the Manchester link between the two.

Expertise:
Hacking Atari 2600 carts

Currently playing:
Escape The Gloomer

Favourite game of all time:
Sheep In Space

PAUL WALKER-EMIG

Even though I was rubbish at it, I still have fond memories of Ocean's Amstrad CPC port of *Chase HQ*.

Expertise:
Pretentious indie games

Currently playing:
Apex Legends

Favourite game of all time:
Metal Gear Solid

RORY MILNE

Head Over Heels – specifically the CPC 464 version for its extra colours. It just holds up so well in terms of gameplay and visuals.

Expertise:
The game that I'm writing about at the time of writing

Currently playing:
Paradroid

Favourite game of all time:
Tempest

LOADING...

***Yoshi's Island* was one of the last games I experienced for my Super Nintendo.** I was desperately trying to resist the lure of Sega's Saturn and used some birthday money to buy the Japanese release of the game. I wasn't disappointed, and almost immediately fell in love with it. The actual platforming was as good as anything I'd experienced in a *Mario* game, while the new mechanics like Yoshi's ability to lob eggs and having to recapture Baby Mario ensured Nintendo's new game felt notably different to anything it had released before. It was the art style of *Yoshi's Island* that I really fell for though and it remains as beautiful to look at today as it did in 1995. *Yoshi's Island* proved to me that 16-bit games still had the capability to astound and amaze and that the 3D bandwagon simply wasn't worth jumping on.

It's a fantastic honour then to feature an exclusive interview with Takashi Tezuka and Shigefumi Hino, two of the directors who made *Yoshi's Island* a reality. Even after all this time I'm always fascinated to hear stories about the games I loved as a youngster and it's a pleasure to share them here. And don't worry, if you're not a fan of Nintendo's lovable dinosaur there's plenty more in this issue to sink your teeth into.

Enjoy the magazine!

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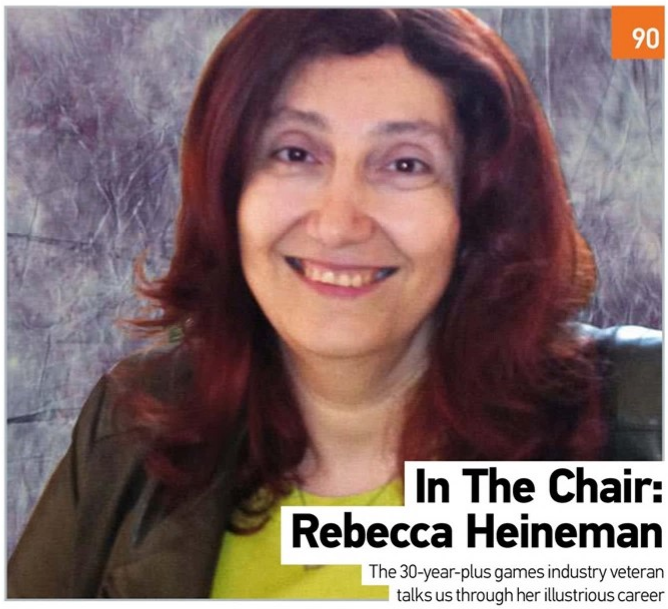

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GIVE US TWO MINUTES AND WE'LL GIVE YOU THE RETRO WORLD

SCIENCE MUSEUM LEVELS UP

Mark Cutmore explains how the museum's annual Power Up event is evolving

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Nick tumbles into a month where game releases are thin on the ground

Photos: The Board of Trustees of the Science Museum, London

In 2016, The Science Museum, based in London, launched Power Up, an interactive gaming event that showcased four decades of videogames history from *Pong* and *Space Invaders* to the last VR experiences. It's been such a success that it is returning for the Easter break and will run from 5 April to 22 April. Head of commercial experiences Mark Cutmore tells us what you can expect to see there.

How did Power Up begin?

With Power Up, we wanted to give our visitors an opportunity to get hands-on with over four decades worth of videogame technology. It launched at the Science And Industry Museum in Manchester and proved so popular that we brought it to the Science Museum. Since then it has become an annual event at both museums. Now 30,000 people a year come to Power Up to try out hundreds of games and consoles from every chapter of gaming.

How difficult is it to source the retro machines?

Some machines are easier to find than others. It's no surprise that the more recent consoles are easy to get hold of and the big commercial successes like the NES and Mega Drive are largely still readily available. It's more challenging to find some of the equipment that didn't sell so well, that is much older, or didn't have a full release in the UK or European market. We've also tried to get hold of some of the more unusual peripherals and games that many people might not have had the chance to use before, like the Donkey Kong Bongos or *Sega Bass Fishing Rod* controller.

» Mark Cutmore is the head of commercial experiences at The Science Museum.

» Power-Up features all sorts of computers and consoles, from brand new PS4s to the BBC Micro.

» Power Up allows you to appreciate four decades of gaming, culminating with the current frontier – virtual reality.

» Games like *Minecraft* stand alongside retro classics, meaning there's something for everyone to enjoy.

What improvements will you be adding to the exhibit this year?
This is the first year that The Science Museum Group has bought all of its own hardware. It's a big commitment so we have spent a long time making sure we have the best mix of consoles, games and peripherals for our visitors. We will also be introducing handheld consoles for the first time and a broader range of games and peripherals for people to try out.

What are the biggest challenges you face with an event such as Power Up?
One of the toughest things is deciding what to include! We'll be packing around 160 consoles into the event, but we still have to make some tough decisions about what goes in and what there isn't space for. With over 40 years of consoles and games to choose from we want to make sure we're presenting a fun and varied mix of content that really showcases the history of the videogames industry.

Do you run any multiplayer competitions at Power Up?
Multiplayer gaming is a huge part of Power up and in an age of online gaming we want to celebrate the social nature of local multiplayer. One of the centrepieces of the event is our local multiplayer setup, which links 16 Xbox 360s for a huge *Halo 3* deathmatch. This year we're keen to introduce more competitive elements to the events and our dedicated staff will be attempting to create some high scores for visitors to beat so they can be crowned as champion gamers.

Which of the featured decades is the most popular?
Everyone has their favourite, but I think things got really interesting in the Nineties when there were huge technological leaps in terms of graphics, storage media and, as we approached 2000, the beginning of online gaming with the Dreamcast. The Nineties holds a special place for me with the Mega Drive being my first console, sparking a lifetime love of *Sonic*, *Streets Of Rage* and *Golden Axe*.

> **"We hope we can inspire people to become the next generation of games designers"**
> Mark Cutmore

Will there be any guest speakers at the event?
We've got such ambitious plans for launching this event with our own hardware and several improvements on past Power UP events that we've decided to focus just on the core event this time. In the past we have had really exciting talks, including a panel discussion featuring the Kingsley brothers, Phil Harrison and Jon Hare discussing the evolution of gaming, and we'll be looking to bring these types of events back for next year.

What's the secret to keeping a younger generation interested in older machines?
Opportunity is a big part of it and Power Up allows people to experience the entire history of the videogames industry in one space. One of the best parts of Power Up is seeing the nostalgia as parents and grandparents point out their first Atari 2600 to their kids and play it together, or watching a lapsed gamer rediscover their love of *Crazy Taxi* on the Dreamcast. Through Power Up we hope we can inspire people to become the next generation of games designers, coders and artists and continue that legacy of games development.

Why do you think retro-themed events like these are so popular with the public?
There seems to be ever growing appreciation for retro gaming, and with so many emulators available online to play the older games, I think it's important to give people the opportunity to experience the original technology while it's still available. Gaming is a tactile and interactive medium, so nothing beats getting hands-on with a console and controller. Events like Power Up give people a unique opportunity to try out consoles they didn't even know existed or only dreamed of owning. We'll have around 40 unique consoles to play on: way more than all but the most hardcore enthusiast has access to. ✱

ATGAMES GETS DISNEY

Plug-and-play console manufacturer AtGames has announced a tie-up with Disney, allowing its past hits to be included on new devices including the Legends Ultimate Home Arcade, Blast! microconsoles, handhelds and retro consoles. Properties include *The Jungle Book*, *The Lion King*, *Wreck-It Ralph*, *Tron* and *Star Wars*, though no specific games have been named. Recent months have seen AtGames add new licenses to its repertoire, like *Tetris*, Namco, Capcom and Data East, for the Legends Flashback console, while maintaining its existing business relationships with Atari and Activision.

REFRESHED EGGS

There appears to be no end to the supply of 'new' retro *Dizzy* games that Philip and Andrew Oliver have hidden in the loft, as *Panic! Dizzy* is the latest to be discovered and given a belated release. The Kickstarter campaign offered both ROM images and new cartridges for the lost game, and it exceeded its £13,500 target with over three weeks to spare. Expect a chat with the Olivers in a future issue.

SKYBOUND CASTS RAISE DEAD

PUBLISHER TO RELEASE CLASSIC DUNGEONS & DRAGONS GAMES ON MODERN PLATFORMS

Beamdog will be bringing six classic *Dungeons & Dragons* role-playing games to modern consoles in partnership with Skybound Games. The enhanced editions of *Baldur's Gate*, *Baldur's Gate II*, *Icewind Dale*, *Neverwinter Nights* and *Planescape: Torment* will be headed to PS4, Xbox One and Switch, having originally been released on PC between 2012 and 2018, as well as the relatively new entry *Baldur's Gate: Siege Of Dragonspear* which was released for PC in 2016.

Beamdog is a team founded by ex-BioWare developers Trent Oster and Cameron Tofer, which made its debut in 2011 with the Wii version of *MDK2*. Since then, the Beamdog team has worked on the games mentioned above. If you're unfamiliar with Skybound Games, that's probably because it's a relatively young company. The publisher was founded in 2018 under Skybound Entertainment, an entertainment company founded by *The Walking Dead* creator Robert Kirkman and TV producer David Alpert. Skybound Games most recently made headlines for its decision to finish the episodic adventure game *The Walking Dead: The Final Season*, a project that was in jeopardy following the collapse of Telltale Games.

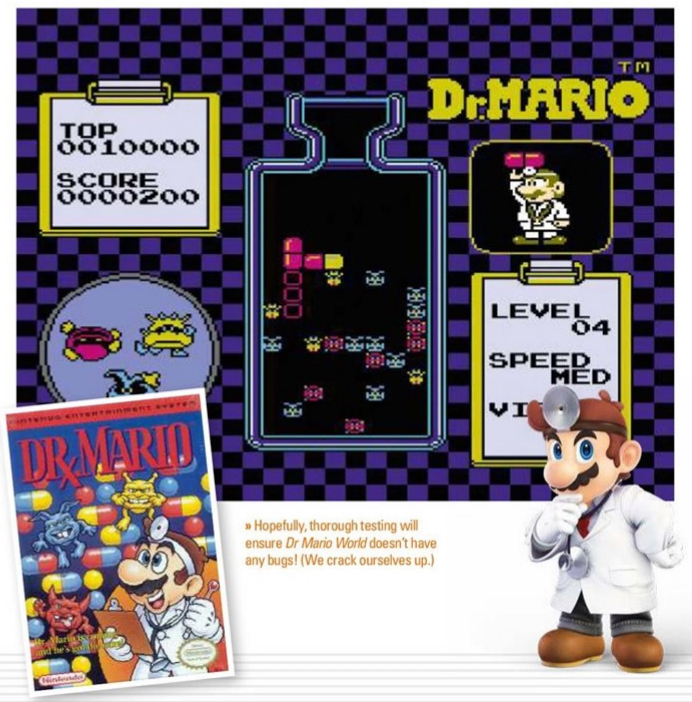
Details about these forthcoming releases are currently thin on the ground, but the games should begin to appear later in 2019. Keep an eye out for further coverage as we learn more.

» [PC] Beamdog's Trent Oster worked on the original *Baldur's Gate* at BioWare, as well as the enhanced port.

ON-CALL DOCTOR

MOBILE DEVICES ARE SICK AND DR MARIO IS THE CURE

Though no longer in the Wii U-induced slump that inspired its first leap into the world of mobile games, Nintendo has continued to develop for iOS and Android due to the success of games such as *Fire Emblem Heroes*. The next game to hit mobile platforms will be *Dr Mario World*, a revival of the spin-off puzzle game that's being coproduced by Nintendo and Line. Though Line isn't well-known in the UK, the company is known best for its mobile app of the same name, which is the most popular instant messaging app in Japan. The game is expected to roll out worldwide early this summer, and we'd be surprised if it differed greatly from the console games in the series. Despite this new announcement, Nintendo's mobile ambitions have been somewhat dented by the delay of *Mario Kart Tour*, which has been pushed back to a summer 2019 release date.



» Hopefully, thorough testing will ensure *Dr Mario World* doesn't have any bugs! (We crack ourselves up.)

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Modern Game Boy Advance: Super Famicom Edition

We've always enjoyed MTV's *Pimp Your Ride* and now there's a Game Boy Advance edition, too, courtesy of Retrosix. The company can create a particular style of Game Boy Advance for a base price of £59.99, but it can be upgraded in several ways depending on how much money you'd like to spend. There are three types of modifications you can add, which include an extremely handy backlit screen (£50), a Class D Amplifier and 1W speaker to boost the sound (£10), or responsive clicky triggers (£10) which have a lot more resistance than the usual buttons. Any old parts are replaced and cleaned up, meaning a fully modified machine delivers an experience far beyond what was capable in 2001.
Price: £59.99+ modifications **From:** retrosix.co.uk

PICK OF THE MONTH

Fire TV Stick 4K

Sega recently released a selection of 25 classic Mega Drive games on Amazon Fire TV so if you've never owned one of these devices before it might be a good time to pick one up. The one here allows you access to a variety of channels, including Amazon Prime, is designed for 4K streaming and also handles the likes of HDR, Dolby Vision and HDR10+.
Price: £49.99
From: Amazon.co.uk

The CRPG Book

In case you're wondering about the title of Sam Dyer's latest book it stands for 'Computer Role-Playing Games' and it's rather special. As you'd expect from Bitmap Books, the quality of this title is absolutely superb with lots of sumptuous photography, interested interviews and delightful screenshots to pore over. Highly recommended.
Price: £29.99
From: Bitmapbooks.co.uk

Ultimate 80s Retro Gaming Collection

Our latest retro tome is a delightful love letter to the Eighties and is filled with all sorts of fantastic features. It all kicks off with a big look at the entire decade and then contains some of our best articles from the last 14 years. From the humble Spectrum to the mighty Amiga, there's something in this book for everyone.

Price: £12.99
From: myfavourite magazines.co.uk

SteelSeries Stratus XL gaming controller

If you want a good work horse for gaming then the Stratus XL is worth considering. It's compatible with various versions of Windows (from 7 upwards), Oculus, Samsung Gear VR and Android 31. Like many modern joypads it is pricey, but it's reassuringly weighty and feels good in the hands. It's also fully compatible with Steam's Big Picture mode and the numerous Mega Drive games that Sega has released on Android.

Price: £52 **From:** amazon.co.uk

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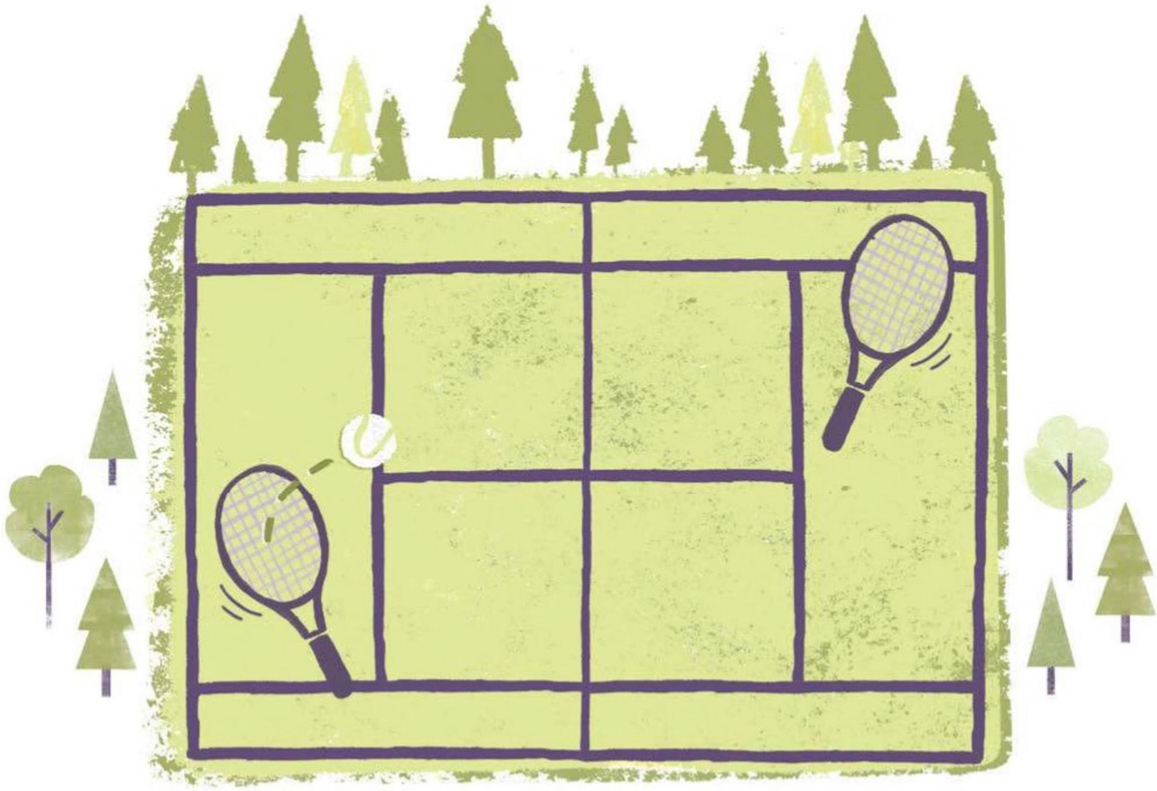

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04 CASIO 12 INCH MIX
ROB HUBBARD & JASON PAGE
FROM PROJECT HUBBARD: ROB RETURNS

05 ONE MAN AND HIS DROID
UNCLE AND THE BACON
FROM PROJECT HUBBARD: ROB AND THE BACON

06 DRAGON'S LAIR II (RIVER CAVES SURF)
JOHAN ANDERSSON
FROM PROJECT HUBBARD: HUBBARD REMIXED

07 KENTILLA (EXCERPT)
MARK 'TDK' KNIGHT
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ROB AND SID REUNITED

One of gaming's greatest composers revisits the C64 with Project Hubbard and 8-Bit Symphony

When considering the greatest musicians ever to use the C64's iconic SID chip, Rob Hubbard is guaranteed to be amongst the names mentioned – and lately, he's got a lot going on that will delight his fans. For a start there's *Project Hubbard*, a multimedia project funded via Kickstarter in 2017, comprising musical projects, a book and more. Of course, the most important part of any Rob Hubbard project will be the music, and the standard version of the *Project Hubbard* collection collects three albums. *Rob Returns* features new SID tunes by Rob himself, ranging from SID renditions of his Eighties synth pieces and Mega Drive work to new tunes. *Hubbard '80* is a 'premix' album that reimagines Rob's SID tunes as an electronic album recorded using 1979 equipment. The *Rob Hubbard Archive* is a double album that collects Rob's unused tracks and other rarities.

The deluxe version of the project includes four extra albums, as well as a range of excellent bonus materials including video interviews, the RobTracker music editor and more. *Rob And The Bacon* features big band covers of Rob's music by Uncle And The Bacon, and *Rock Hubbard* is a rock remix album by Fastloaders. Mark Knight's *Escape From New Rob* uses Rob's Commodore 64 tracks as a base for an epic soundtrack that is somewhat reminiscent of John Carpenter's work, and *Robdez-Vous* is a 'best of' collection for Rob's tunes in *Project Sidologie*. As well as the hefty 300-page book *Rob Hubbard: The Official Reference Book*, the project comprises some video material, and, most importantly, a collection of musical projects.

» Rob Hubbard has a lot of upcoming projects going on related to his work [Photo by Peter Sanden].

What sort of musical styles can listeners expect from this new Rob Hubbard experience? "There's a bit of everything," we're told by the veteran musician. "There's a couple of things that are based on some stuff I wrote many years before I did the SID stuff when I was going through a bit more of a jazzy type of phase, and there are some other things that are a little bit more traditional I would say, so I think there's a bit of a mixture." And how did he go about making them? "A guy called Jason Page has been helping out with a lot of that, I provided him with some material to do some SID tunes using a new piece of software that he developed, using some of my old 6502 code which I managed to dig out," Rob explains. "So that's about half of it, and then the other half is basically stuff that I've done recently, stuff that I've created specially for this new Kickstarter, using my old 6502 code and a sampler just like I used to do back in the day."

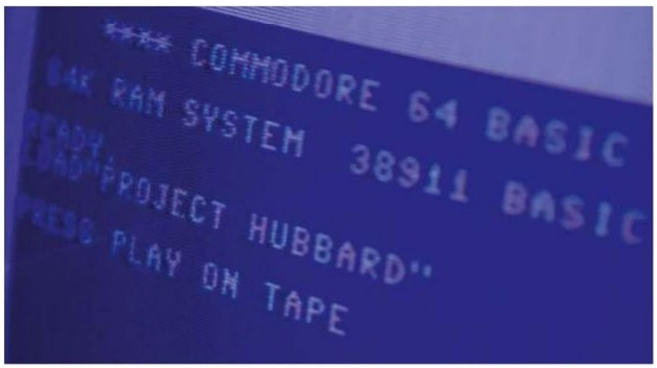
» Seeing all of these representative characters together makes you realise just how prolific Rob was back in the Eighties.

» Rob has been involved in past game music performances, as seen here with the late Ben Daglish [Photo by Peter Sanden].

Getting that old code back into a usable state was no mean feat. "When I worked at EA, when I went to America, I stored all my source code disks and a couple of keyboards at EA UK," remembers Rob. "Then when I asked for them, they'd moved office and when they moved office, they thought it was a load of trash so they just put it all in a skip. It was purely by chance that I happened to keep some of the source code that I had on a couple of C64 games that I did at EA, *Kings Of The Beach* and *Power Play Hockey* – that was a bit of a start," he explains.

> **"Nowadays, you're spoilt for choice with different kinds of music packages"**
> Rob Hubbard

Rob's own ingenuity was required to make more progress, though. "The rest, I had to actually get SID files and reverse-engineer them," he explains. "I reverse engineered *Arcade Classics*, *Commando*, *Sanxion* – they all used different things in the driver, and I wanted to see how it worked. There are still some things that are a bit of a mystery as to how I did it, but I figured most of it out."



» Although Rob worked on other platforms, he'll always be most heavily associated with the Commodore 64.

» There is no escape – Project *Hubbard* assimilates all it encounters [Art by Trevor Storey Art].

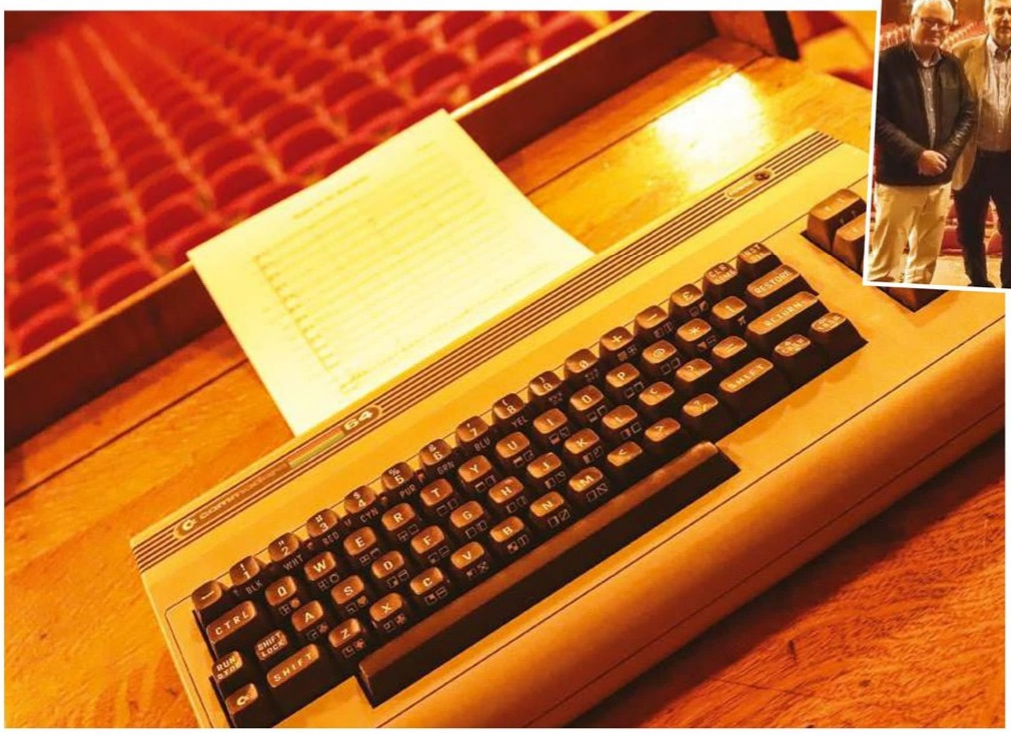
So how did he find the experience of returning to the SID chip that helped establish him as the legendary musician he is known to be today? "It's really difficult, very difficult I would say," Rob laments. "Because the restrictions are all still there and it all comes flooding back about what you're trying to do, and how you try to overcome the limitations of just having three and sometimes four voices. So it comes flooding back, and the frustrations are still there.

"You've just got to work really hard to get something out of it. It's even worse than that actually, because back in the day there was nothing else. Back in the Eighties, there wasn't anything else. Nowadays, you're spoilt for choice with different kinds of music packages and sequencers, MIDI and VSTs and all the rest of it."

But for someone like Rob who remembers the scene as it used to be, the problem isn't just one of technology. "You can't get into the exact thing that was going on, because it was a big cultural event as well," he explains. "Doing music for games in the Eighties was a cultural thing – as well as supporting the games, there was a big demo scene and culture that was driving it, and of course that doesn't exist now. In terms of part of being of that creative mindset, it's not there, so that makes it even harder to try to do anything."

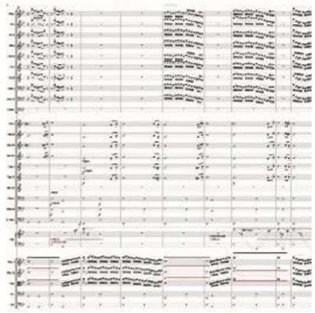
Also available and funded by the Kickstarter is a 300-page book, *Rob Hubbard: The Official Reference Book*. "The book is basically a reference of most of the stuff that I've worked on, some musical examples and some anecdotes. A guy called Kenny McAlpine's been doing some things on that, and I've had to send him PDFs of various musical examples, and I sent Chris some stuff about what I was doing before I went into C64 stuff."

The other big project Rob is involved with is 8-Bit Symphony. This concert is due to take place on 15 June 2019 at Hull City Hall, with music performed by the Hull Philharmonic Orchestra. As well as Rob's work, a number of games will have their music represented at 8-Bit Symphony, including *Green Beret*, *Barbarian II* and *The Last Ninja*. The event will be supporting the charities SpecialEffect and Macmillan Cancer Support, and pays special tribute to late videogame composers Richard Joseph and Ben Daglish – the latter of whom was a key part of arranging the concert before he passed away late last year. Tickets are available from £15.



» LOAD "AUDIENCE",8,1 [Photo by LA Production Studios]

» The 8-Bit Symphony team assembles at Hull City Hall, ready to tickle your nostalgia gland with its sonic delights. [Photo by LA Production Studios]



» Here's a score for *Monty On The Run*, as you'll hear it at 8-Bit Symphony.

"I have been in control of my own orchestrations – my own arrangements"

Rob Hubbard

"It wasn't part of the Kickstarter, it was just something that we were hoping to aspire to sometime in the future. We didn't really expect it to happen," says Rob. We have to ask the musician, why not? "It's so difficult to get it organised and to basically get the costing done, and then to try to promise people you're going to deliver it when there's no guarantee that you're going to deliver it," he explains. "It's been quite an enormous effort so far, and it's still ongoing, trying to get everything together. Doing the orchestrations, trying to get everything scheduled in time, getting the parts organised, getting the printing done – it's quite a huge effort.""

Despite the hard work involved, Rob is looking forward to the event. "It's really exciting, because it's not very often that you're going to get the chance to write for an orchestra – it's something that most aspiring musicians dream of, it's not something that happens every day for people," he tells us. "There have been other events where Commodore 64 music, including some of mine, has been performed – unfortunately I wasn't involved, so I didn't really have much say as to what they were doing."

Rob's response leads us to believe that being involved at this level is surely a good thing, then? "Oh yeah, absolutely, because I have been in control of my own orchestrations – my own arrangements, my own orchestrations," he replies. "So if people don't think it's any good, they've only got to blame me!"

We're keen – and we are sure you are, too – to learn which Rob's tunes will be performed at the concert. "I think there's about six pieces of mine now," we're told. "There's a *Monty On The Run* expanded version that I did, that has completely new sections that I wrote added to it, and it's still got most of the old sections apart from the guitar solo which is gone. *Kentilla*'s in there, *International Karate* – that's a complete symphonic version and it's based upon the version that I did in 2005 for the Prague orchestra, and there's a medley of high score tunes that I've done on orchestras. *WAR* – there's a version of that [in there] I've done for orchestra, and *Flash Gordon*."

We're keen to learn about Rob's thoughts as to why specifically those tracks were chosen. "In a lot of ways, the choice is dictated by the fact that 80 per cent of the stuff that I did back then is not suitable," Rob replies to our pondering. "*Sanxion* and *Knuckle Busters* and some of these crazy things are just totally unsuitable for an orchestra, and any attempt to do them really wouldn't be doing the orchestra any justice, or the original version any justice. Orchestras are not very good at playing rock and roll, you know?"

» As well as being the cover of the book, you can pick up this stylised rendition of Rob on a mug! [Art by Definite Designs]

With all this activity, we're curious about something Rob said in a previous interview with **Retro Gamer**, way back in issue 100. At that time, the musician told us that he felt burned out on composing due to his high work rate. Has anything happened since then that has changed that frame of mind?

"Yeah, I think that's changed now, because I don't do any stuff for games anymore," he replies. "I've pretty much retired from games, I'll leave it to all those other people who want to put up with the industry. I don't." While that's something of a loss to videogames, we're pleased to hear that Rob Hubbard is once again enjoying creating music – especially if it means the prospect of more projects like this cropping up in the future. ✱

For more information on *Project Hubbard*, visit projecthubbard.com. To find out more about 8-Bit Symphony, visit 8-bit-symphony.com.

ROB HUBBARD REMIXED

For volume two of our music CD series we've teamed up again with C64Audio.com, the pioneering label that has been creating and publishing game music remixes for over 20 years. For this compilation – a tribute to Rob Hubbard, who created the original tracks on which these remixes are based – we aimed to include a broader range of musical styles than before, ranging from John Carpenter to surf rock, with even a dollop of big band along the way. All of these pieces originate from albums available at C64Audio.com; here, founder Chris Abbott gives us the inside track on each one:

» Chris Abbott is working with Rob on various projects.

» [C64] Our last CD prompted a lot of requests for *Monty On The Run*, so we're delighted to include it here.

01 SANQUINOXE
MARCEL DONNÉ
FROM PROJECT SIDOLOGIE: ROBDEZ-VOUS

"The sonic identity of Jean-Michel Jarre's flagship track *Equinoxe 5*, with the musical content of Rob Hubbard's flagship track *Sanxion Loader/Thalamusik*. This track, complete with full-length spine-tingling solos, is the best example of what Maniacs Of Noise alumni Marcel Donné was aiming for in *Project Sidologie*, which is a project that took four years to complete, including a year to mix the surround-sound versions, and ended up as an eight-disc boxset."

02 COMMANDO MATT GRAY
FROM REFORMATION 2

"When Matt Gray's *Reformation* project started in 2015, no one knew what to expect from it – least of all Matt himself. The project started to come together with a well-received cover of *Sanxion*, proving there was a dedicated fanbase just waiting for Rob Hubbard's flagship tracks to be explored in Matt's signature style. This version of *Commando* is the flagship track of *Reformation 2*, and kicks some mighty military butt."

03 SPELLBOUND
BARRY LEITCH
FROM PROJECT HUBBARD: HUBBARD REMIXED

"While the title of this remix is *Spellbound*, to me it's called *Hubbard Is God* – the Rob Hubbard version of Jogeir Liljedahl's seminal remix of *Green Beret/Rambo* loader *Galway Is God*. Both remixes featuring sparkling arpeggio-happy synths, a dramatic structural remix and gorgeous use of the original iconic sounds. Barry is a Rob Hubbard superfan, as well as being his friend, and you can hear the love here."

04 CASIO 12 INCH MIX
ROB HUBBARD & JASON PAGE
FROM PROJECT HUBBARD: ROB RETURNS

"Wherever Rob does, Casio follows. Originally a synth track composed when he had studio access in the early Eighties, this made its way into the Compunet demo *Synth Sample III*. Rob and Max Hall then reworked it for the *Bedrooms To Billions* soundtrack, and now it's back to SID in expanded form for *Project Hubbard*. As the first SID in the project, and a proof of concept, it was Jason Page who realised it in *Sidtracker64* to show Rob what was possible."

05 ONE MAN AND HIS DROID UNCLE AND THE BACON
FROM PROJECT HUBBARD: ROB AND THE BACON

"No one does big band like the Bacon. He could find the big band vibe in the *Death March*."

06 DRAGON'S LAIR II (RIVER CAVES SURF)
JOHAN ANDERSSON
FROM PROJECT HUBBARD: HUBBARD REMIXED

"Some remixes come out of left field because they say as much about the remixer as the music being remixed. This works perfectly – and it's water-based, so I'd claim that it's still relevant!"

07 KENTILLA (EXCERPT)
MARK 'TDK' KNIGHT
FROM PROJECT HUBBARD: ESCAPE FROM NEW ROB

"Mark's original brief was to reimagine four Rob Hubbard mega-pieces as vintage John Carpenter, and boy, did he succeed."

08 CHIMERA CHRIS ABBOTT & ALISTAIR 'BOZ' BOWNESS
FROM KARMA 64

"After the 'am-so-serious' of *Back In Time 3*, the *Karma 64* album was created mostly on the Korg Karma between pub lunches with friend, collaborator, remixer and radio star Boz. The album was a strange mix of dance, organic progressive stuff and reworks from *Back In Time 1*. A fun time was had by all."

09 MONTY ON THE RUN SUITE (PREVIEW)
ROB HUBBARD
FROM 8-BIT SYMPHONY

"This is an early version of the finished arrangement of this iconic piece. Rob poured himself into this arrangement – you can tell by the astonishing detail. It will be premiered at the 8-Bit Symphony concert in Hull on 15 June. It's like the C64's Woodstock. Recorded mostly using the *Orchestral Tools* sample libraries, this will be a life-changing experience live. Don't miss it!."

10 COMMANDO (HIGH SCORE) FASTLOADERS
FROM PROJECT HUBBARD: ROCK HUBBARD

"Remix of the year 2019 and number one at the venerable remix.kwed.org site, Rob described this remix as "tasty". This piece means a lot to many, and the guitar solos that Jarle H Olsen of FastLoaders conjures up are magnificent. Being an Amiga fan, Jarle's next task is an Amiga-based Kickstarter: the first all-rock tribute to the Amiga. You heard it here first."

> **"There was a dedicated fanbase just waiting for Rob Hubbard's flagship tracks"**
> Chris Abbott

» [C64] *One Man And His Droid* could be quite tricky in places, but the score that accompanied it was incredible. The remix is just as good.

» [C64] *Rob's Commando* tracks are legendary and our latest CD has two tracks dedicated to the game, including its excellent high score composition.

Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine Digitiser. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of Digitizer The Show at www.bit.ly/biffo2000.

Going mainstream

Back in the early-to-mid-Eighties, when games first got lodged in my heart, like a coronary blockage, I sort of saw them as semi-disposable. I was always easily distracted by the next sparkly new thing.

There was little, if no, looking back in those early days. *Atic Atac* would be superseded by *Underwurlde*, which would be replaced in my affections by *Knight Lore*, and then I got an Atari ST and for a while it was all about *Indiana Jones And The Last Crusade*, until I fell in love with my Mega Drive. The next big thing was always on the horizon. The thrill of the new was in many ways more palpable and powerful than the thrill of the now.

Of course, I'm sure that still applies, to a point, for the generation of gamers who are the age now that I was in 1984. And yet eventually that ceaseless march forwards started to slow for me, and games which I once cast aside through the sheer weight of my onward momentum, suddenly mattered again.

I think it happened relatively early for me, in my early twenties, around the time that Sega and Nintendo started duking it out across the globe. I doubt I'm unusual in looking back during early adulthood – when suddenly being grown-up may make you want to cling onto familiar, safe, memories – but it was around then that gaming suddenly began feeling as if it was no longer mine.

That might sound weird – though I'm well aware that the British games industry of the Eighties wasn't exactly making games solely for me, nice as that would've been. But gaming went from being something that seemed parochial and niche, and made me feel like I was part of a select little club, to being something that affected the globe.

With the launch of *Sonic The Hedgehog 2*, games weren't just snuck out into shops as a sort of afterthought, but released in every country simultaneously, with huge launch events, and days named after them. Games were suddenly being reported about in the mainstream news, and getting coverage in magazines that weren't dedicated entirely to games. It was exciting, to be sure, but in that I also felt I'd lost something. That was the tipping point at which I became as much a retro gamer as a gamer.

When gaming went corporate and global, it lost part of the grubby, cottage industry, charm that I'd fallen in love with, and the only way to still have access to that was to look back.

I remember when my daughter was little, and she had this revolting security blanket which she took to bed with her every night. It was filthy, and absolutely stunk, and one day it got put in the wash. She was devastated; what she loved wasn't the blanket herself, but all the stink on it, and without the stink it wasn't the same. So, I guess everybody has their security blanket. Turns out that mine, for a large part of my life, has been old videogames.

Mmm. Gotta love that old game stink! ✱

> "Games were suddenly being reported about in the mainstream news"

Do you agree with Paul's thoughts? Contact us at:
RetroGamerUK @RetroGamer_Mag darran.jones@futurenet.com

Commander In Chief

Ryan Meloy gives us intel on his retro-inspired CBBC show, Last Commanders

Lovers of the cult Eighties game show *Knightmare* might be interested to learn that a spiritual successor exists in the form of *Last Commanders*. With a second series airing in May, it's the perfect time to catch up with development producer, Ryan Meloy and find out more about it.

Where did the idea for *Last Commanders* originate?
We wanted to make a TV show that was specifically for kids of this generation. On our development team there are shows that we loved as a children, *Knightmare* and *The Adventure Game* are firm favourites in this office! Those shows were specifically designed for our generation, they stayed with us from childhood and remain much loved because of the excitement and ability to transport viewers to another world. We wanted to try and emulate that and so our first question became, 'If kids today are watching videogames on YouTube, how do we make a first-person videogame into a TV show?'

What classic videogames does it take inspiration from?
The frenetic nature of the visuals harks back to the corridor shooters of the Nineties like *Quake*, *Doom* and *Unreal*. As do the story and setting of the show, which are very cyberpunk. There are lots of games we're fans of that inspired setpieces and gameplay, there's lots of *Metal Gear* moments and the Cybers in the show are relentless, a bit like Nemesis in *Resident Evil 3*. Even our big bad villain has shades of SHODAN from *System Shock*!

» *Last Commanders* has been a big hit for CBBC and channels classic shows like *Knightmare*.

What elements from adventure games have you used?
We wanted to create puzzles that made sense within the story and environment of the world (rather than just puzzles in a room for the sake of it). We looked at a lot of the LucasArts point-and-click games as well as the first few *Resident Evil* titles. Those games made you think about what makes logical sense in the story and further immerses you into the world as a result.

We get a strong *Knightmare* vibe. Is that intentional?
I'm a big fan of *Knightmare*. When I was young, I was really into games, comic books and movies and at that time it seemed like *Knightmare* was one of the only children's TV shows that was specifically made with someone like me in mind. So, yeah, it was a big inspiration in making *Last Commanders*.

How have you evolved the show for its second season?
I think we're more confident in our storytelling. Our story arc will be more layered with bigger characters and twists. Our puzzles will be more varied as will the set. It's cliched, but bigger, bolder, better!

» Skye is a freedom fighter who enlists the help of viewers to help defeat Sciron.

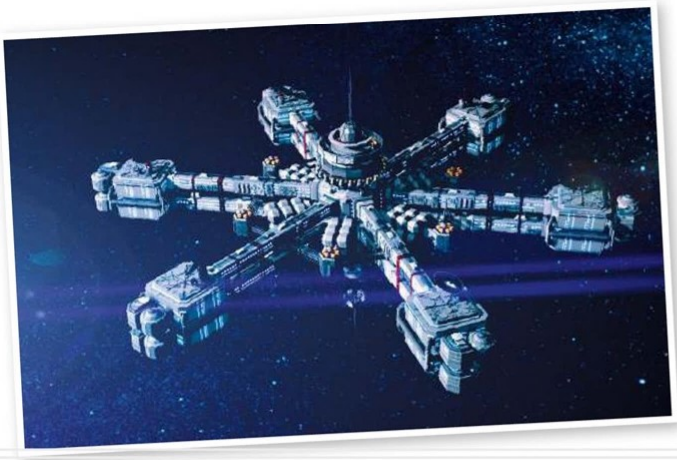
» There's a charming lo-fi aesthetic to *Last Commanders*, which we find really endearing.

How are kids responding to *Last Commanders*?
The kids love it. There aren't too many shows for children that can terrify them, make them laugh and then have them playing along all in the space of 30 seconds. The editing is like that of a YouTube production, so I think it feels and looks unique on the TV landscape and the kids seem to respond to that. And you can't help but get caught up in their excitement.

What sort of Easter eggs can our readers look out for?
There are all sorts of little nods throughout the show. The character select screen at the start is an homage to old beat-'em-ups. The costumes are inspired by the likes of Akira, *Streets Of Rage*, 2000AD comics and even the Cybers are a nod to classic sci-fi robots.

Why do you think *Last Commanders* has proven to be so popular?
It looks so different from other TV shows and that it's scary also helps, there's a real thrill in following the unpredictable narrative. ✱

You can find Last Commanders on CBBC. Visit bit.ly/lastcommanders for more information.



> **"The frenetic nature of the visuals harks back to the corridor shooters of the Nineties"**
> Ryan Meloy

BACK TO THE NOUGHTIES

APRIL 2002 – Games critics cry out from under a tidal wave of uninteresting games, Xbox cuts its price to match the PS2, while the GBA has a fairly decent month. Nick Thorpe gazes ambivalently into the time vortex…

NT

NEWS APRIL 2002

On 4 April, the Angolan Civil War finally ceased, ending an armed struggle that had raged for over two decades. The war had started in 1975 following the African nation's independence from Portugal, and the main belligerents were two former independence movements with differing goals and leadership. The People's Movement for the Liberation of Angola (MPLA) government finally achieved victory following the deaths of two opposition UNITA leaders – Jonas Savimbi and António Dembo.

The establishment of the International Criminal Court was officially ratified on 11 April, in a UN ceremony in which ten nations deposited their ratifications. The countries that ratified on this day were Bosnia-Herzegovina, Bulgaria, Cambodia, the Democratic Republic Of The Congo, Ireland, Jordan, Mongolia, Niger, Romania and Slovakia. Creating the court had been an project since 1989, and it would come into force on 1 June.

Alice In Chains vocalist and songwriter Layne Staley was found dead at the age of 34 on 19 April, after accountants noticed a lack of activity in his bank account. Police discovered his body at his home, where he had passed away some two weeks prior – the autopsy and toxicology report suggested that he had died accidentally after taking a mixture of heroin and cocaine.

[PC] *Star Trek: Bridge Commander* allowed budding Jedi masters to control iconic craft like the Millennium Falcon here.

THE LATEST NEWS FROM APRIL 2002

After just five weeks on European shelves, the Xbox was already a console in crisis. Though Bill's box was doing strong business in North America, Japanese demand for the device had already collapsed to around 3,000 sales per week. The situation was no better in Europe – initial strong demand had already tailed off, with *The Independent* suggesting that Sony's PlayStation 2 was outselling the new machine by more than five to one. In order to rescue the Xbox project in the European market, Microsoft made the bold move to cut the price of the console from £299 to £199, matching the PlayStation 2. To head off any potential resentment, early Xbox adopters were offered two free games and an extra controller by way of thanks. Within days of Microsoft's announcement, Nintendo responded by cutting the UK price of the GameCube to £129, significantly undercutting both of its competitors despite the fact that the machine was still yet to launch.

For most console gamers, the price war was the most exciting thing going on this month. *Edge* feared that its April 2002 issue "will be viewed as the worst issue for some considerable length of time", mostly because of the belief that "the strength of an issue is, in the mind of the reader, directly proportional to the quality of games within". The only new game to reach 7/10 was *Star Trek: Bridge Commander*, with the other two being the PAL release of *Dead Or Alive 3* and the Game Boy Advance conversion of *Broken Sword*. The pages of other magazines weren't exactly filled with overlooked brilliance, either.

The best new game of the month was *Virtua Fighter 4* on PS2. Sega's coin-op conversion had already been covered by *Play* on import the previous month, scoring 94%, but the UK version appeared in *Official PlayStation 2 Magazine* this month and scored 8/10. Reviewer Keith Stuart felt that the game was "the only choice for gamers who want a long-lasting single-player challenge" due to its Kumite mode, and that "*Tekken* has a hell of a fight on its hands after dominating the PlayStation fighting arena for seven years." However, he did also note that it was "not a game for casual post-pub pugilists" and that there were "no crazy fireball moves".

State Of Emergency certainly sold well, but didn't receive critical acclaim. *Official PlayStation 2 Magazine*'s

[PS2] Despite some jagged graphics, *Virtua Fighter 4* was a championship contender among PS2 brawlers.

[PS2] Despite misgivings from the press, *State Of Emergency* managed to sell pretty well for Take Two.

[GameCube] *Virtua Striker 3* just wasn't realistic – look at England beating Germany here if you need any proof.

[GBA] *Tekken Advance* was like *Tekken 3*, but with sprites instead of polygonal graphics. Great, right?

[Xbox] With poor releases like *Shrek* ruling schedules, it's no wonder the Xbox needed a huge price cut.

Adrian Lawton awarded Rockstar's beat-'em-up 7/10, claiming that it was a "non-stop orgy of violence and destruction" that "glorifies mass murder just for the sake of it", but that it featured "simplistic but addictive gameplay" and was "an enjoyable (if morally abhorrent) title". *Edge*'s review was more critical, awarding the game 4/10 and decrying it as a game with "no charisma and nothing new to offer" as well as "a videogame distinguished only by the marketing ingenuity behind it." Other releases reviewed by *Official PlayStation 2 Magazine* this month included overlooked RPG *Shadow Hearts* (7/10), arcade lightgun conversion *Vampire Night* (6/10), fantasy snowboarding oddity *Dark Summit* (5/10) and the repugnant *Peter Pan: Return To Neverland* (2/10).

Things weren't much better elsewhere. *Virtua Striker 3* failed to impress on the GameCube, with the Japanese version earning 5/10 from *Edge* and 50% from *NGC*. The latter magazine commented that the football game "feels about as close to the sport as fishing", and that it was "an unreasonable, frustrating experience". *Dave Mirra Freestyle BMX 2* was given 8.5/10 by *XBM*, but the *Official Xbox Magazine* review wasn't as positive, with Jon Attaway feeling that "poor controls spoil the overall experience" and scoring it 6.9/10. Other Xbox games reviewed this month include *Genma Onimusha* (6/10, *Edge*), *Shrek* (5.0/10, *Official Xbox Magazine*) and *Crash Bandicoot: The Wrath Of Cortex* (5.5/10, *XBM*).

In the world of computer games, things were a little better. *Warrior Kings* was *PC Gamer*'s game of the month, scoring a commendable 86% – a score rather higher than the critical consensus, but one that reviewer Tim Stone felt that "one of the most attractive and atmospheric titles ever to make a play for the RTS throne" justified. The aforementioned *Star Trek: Bridge Commander* picked up 82% here, while both the business simulation *Capitalism II* and Sega's *Virtua Tennis* scored 80%, with framerate issues causing Jim McCauley to declare that the Dreamcast conversion "should have been so much better". Still, it was better than the rest of the month's fare, including *Europa Universalis II* (58%), *Fairy Tale* (47%) and *Sid Meier's Sim Golf* (68%).

Thankfully, the Game Boy Advance also provided some respite from the torrent of mediocrity. Other than the aforementioned conversion of *Broken Sword*, which earned a 5/5 from *NGC* for its excellence, *Tekken Advance* scored 4/5 for providing a reasonable portable approximation of *Tekken 3*. Overhead tactical shooter *Rainbow Six: Rogue Spear* also earned 4/5 on the strength of its multiplayer mode, described as "tactical espionage heaven". Sadly, *Mike Tyson Boxing* (1/5), *Jurassic Park Dino Attack* (2/5) and *Moto GP* (2/5) just didn't measure up.

Join us again next month for the launch of the GameCube, and hopefully the arrival of some more interesting games, too. ✱

CHARTS

APRIL 2002

XBOX

1. Halo: Combat Evolved (Microsoft)
2. Project Gotham Racing (Microsoft)
3. Tony Hawk's Pro Skater 3 (Activision)
4. Wreckless: The Yakuza Missions (Activision)
5. Max Payne (Take 2)

PLAYSTATION 2

1. Grand Theft Auto III (Take 2)
2. Max Payne (Take 2)
3. Legends Of Wrestling (Acclaim)
4. Ecco The Dolphin: Defender Of The Future (Sony)
5. WipEout Fusion (Sony)

MUSIC

1. The Hindu Times (Oasis)
2. Girlfriend (NSync)
3. There Goes The Fear (Doves)
4. Unchained Melody (Gareth Gates)
5. Lazy (X-Press 2 feat. David Byrne)

FILM

1. About A Boy
2. Bend It Like Beckham
3. The Scorpion King
4. Joy Ride
5. Ice Age

THIS MONTH IN...

Edge

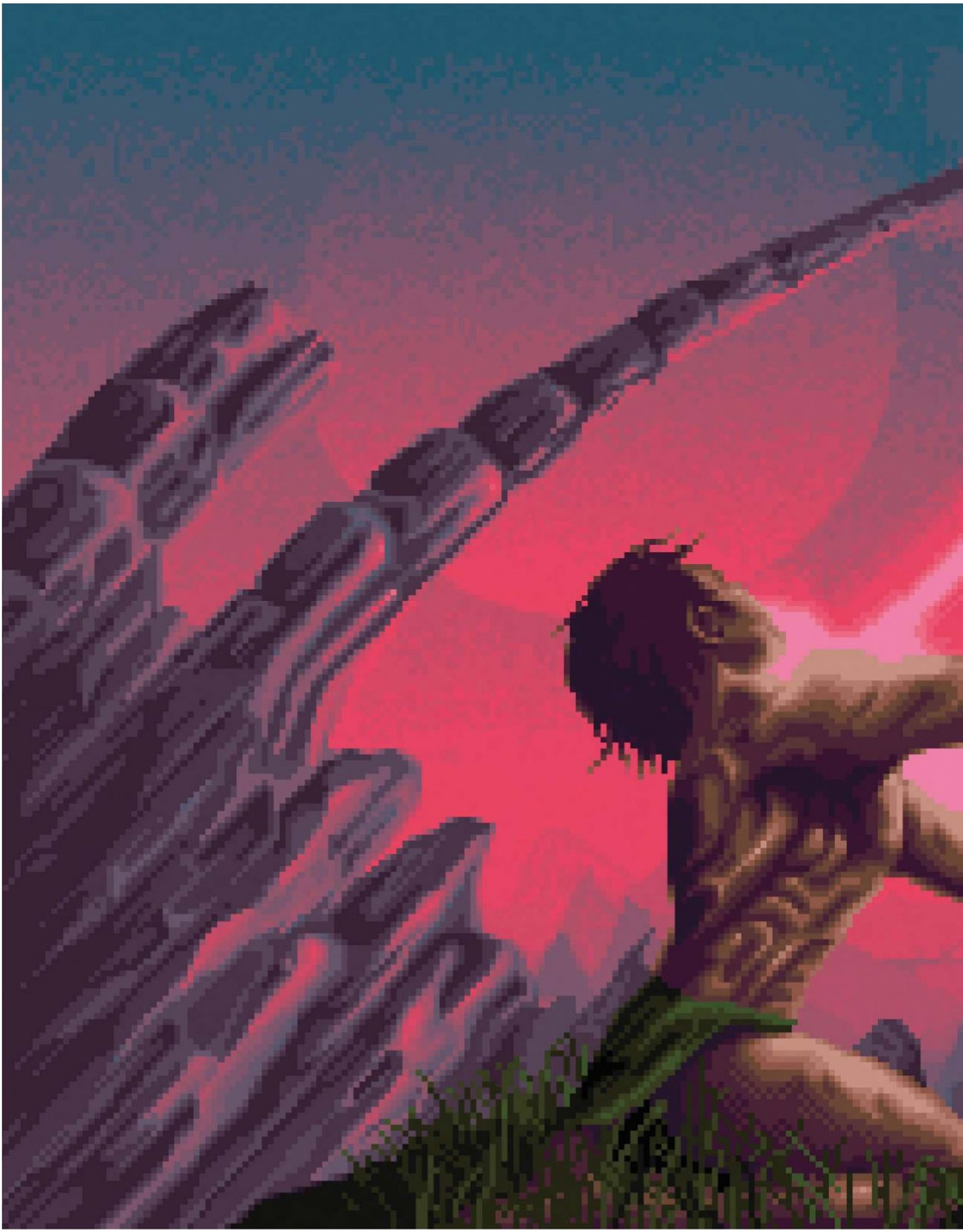
This month's 'Out There' section contains interesting news of a device that scales RGB video signals from any older console for VGA computer monitors, and can add scanlines. Apparently, Micomsoft's XRGB-2 "impresses with its clarity and convenience" – we wonder whatever became of that particular product line?

NGC

With the lack of any domestic GameCube content to cover, *NGC* runs a bizarre section titled 'When Nintendo Characters Attack', featuring Mario losing it at Richard and Judy, Peach doing a runner from the police, Turok shooting elephants and a Royal Variety Performance featuring Link and Ganon as a double act.

Cube

Squaresoft and Nintendo have mended fences after six years of sour relations, meaning that the famed RPG developer would be bringing its games to GameCube and Game Boy Advance. A *Final Fantasy Tactics* game was in the works for GBA, and Akitoshi Kawazu's new studio announced a GC/GBA link-up *Final Fantasy* game.



Shadow Of The Beast II

DEATH HAS NEVER SOUNDED SO GOOD

» RETROREVIVAL

» AMIGA » 1990 » REFLECTIONS INTERACTIVE

***Shadow Of The Beast* was something of a watershed moment for me as a young gamer, as it highlighted just how incredible videogames could look.** The debate about videogames being art will rage forever, but there's no denying that the mid-Eighties and the move to 16-bit visuals helped make the argument far more relevant than it was in the earlier abstract days of computer games.

While I have fond memories of playing the original *Shadow Of The Beast* at my friend's house, it's the sequel that I've always had a soft spot for. That's not because I think it's necessarily a better game, but because parts of it looked and sounded so sensational. Now I'm one of the first people who will boorishly complain about how the videogames of today are happier to focus on aesthetics rather than their gameplay, but I wasn't like that in 1990, possibly because everything still felt fresh and exciting to my 17-year-old eyes.

While *Shadow Of The Beast II*'s visuals didn't impress me as much as those of the original game (it's colour palette is way too dark for starters), I absolutely adored its cinematic opening which perfectly set up the game's subsequent quest. As impressive as that sequence of events was, the thing I most vividly remember about Reflections' sequel is the haunting guitar riff that accompanies the game over screen. It was one of the few games I never minded dying in as watching your avatar slumped on his knees with outstretched hands while that solo played was such an impactful moment. ✱

IN THE KNOW

» **PUBLISHER:** NINTENDO

» **DEVELOPER:** NINTENDO EAD

» **RELEASED:** 1995

» **PLATFORM:** SNES

» **GENRE:** PLATFORMER

THE MAKING OF SUPER MARIO WORLD 2 YOSHI'S ISLAND

Tasked with delivering a successor to Super Mario World, Nintendo's developers decided to entrust the starring role to a new hero and knocked it out of the park. Takashi Tezuka and Shigefumi Hino look back on the development of Yoshi's Island

Words by Nick Thorpe

There's an enormous burden of expectation that comes with following up a game like *Super Mario World*. Retro Gamer readers voted it the greatest game of all time, and many would argue that it was as close as you could get to a perfect game, as it built admirably on the already refined Mario platform formula while adding the benefits of 16-bit technology. It would be very hard to elaborate on the formula, especially given that delays to the Ultra 64 project meant that Nintendo was still tied to the 16-bit SNES. With player expectations guaranteed to be through the roof, was there even any sense in trying to create a traditional *Mario* sequel?

It turns out that Takashi Tezuka and Shigefumi Hino didn't think so. They were two of the directors of *Yoshi's Island*, alongside fellow directors Toshihiko Nakago and Hideki Konno, with Shigeru Miyamoto acting as producer. Working together at Nintendo EAD, this team wanted to take a different approach instead. "We felt we'd done everything we wanted to for side-scrolling with *Super Mario World*, and so wanted to try creating a platformer with a different angle to it," the developers explain. "Before *Yoshi's Island*, we'd only created games with Mario as the lead character. We felt that changing the lead character would give us a different perspective and different gameplay possibilities, and so we started thinking up a game with Yoshi as the lead."

That makes sense – but the Mushroom Kingdom is home to many interesting characters, many of whom have also starred in spin-offs. What made Yoshi the character of choice over the likes of Wario, Luigi or Peach? This goes back to the creation of the character for *Super Mario World*, as we discover. "The idea for Yoshi came about because Mr Miyamoto wanted to have Mario ride a horse. We thought it would be better to have a new character rather than a horse, so Mr Hino and I went about creating one," Tezuka tells us. "Yoshi turned into quite the cute character, and we were very interested in creating some kind of spin-off with him; that's where it all began."

This wasn't Yoshi's first starring role in a game, of course. Mario's trusty steed had previously appeared headlined three games, the puzzle games *Mario & Yoshi* and *Yoshi's Cookie* and the Super Scope blaster *Yoshi's Safari*. But none

» [SNES] The flutter jump is a useful trick that can often save Yoshi when a regular jump might see him plummet.

» [SNES] Transforming into a helicopter is fun, but it's important to find a way to transform back – you won't get anywhere without one.

of these were platform games, and Yoshi's only appearance in a platform game so far had been as a sub-character. So while Yoshi had certain established abilities such as his ability to grab enemies with his tongue and eat them, the team had a great deal of freedom to decide on new abilities and a new style of play that would provide a clear break from traditional *Mario* games.

That said, it wasn't easy for the team to come up with these new and interesting ideas – according to Hino, such things were quickly seized upon when they did arrive. "I remember Mr Tezuka coming in suddenly one morning and dropping an idea on us," he says. "The development team were hungry for the seeds of an idea and so we ran with it; we discussed them over and over and polished them into something we could implement in game." Abilities that Yoshi gained in *Yoshi's Island* include the 'flutter jump' – an extended jump where the dinosaur struggles against gravity in a cartoonish fashion – as well as the 'ground pound' jumping attack that could be used to smash stakes into the floor, something Mario would later adopt. Yoshi also gained a variety of possible vehicle transformations including helicopters, cars and submarines, but these could only be used in certain places.

However, the ability that most closely tied into Yoshi's existing skillset was his unique capability to create eggs. As in *Super Mario World*, Yoshi could use his tongue to eat enemies and then spit them back out at other enemies as an attack. However, by pushing the down button with an enemy in Yoshi's mouth, the player could have Yoshi lay an egg. Instead of containing items or more Yoshis, as they did in the likes of *Super Mario World*, eggs could be thrown, rebounding off walls, breaking through barriers, collecting objects and smashing enemies.

"We wanted to include egg-throwing as throwing actions weren't something that had appeared much in *Mario* games," Tezuka tells us. "Having said that, though, giving users the ability to simultaneously control both Yoshi's movement and the direction they throw eggs in proved challenging and gave us quite the headache!" However, it proved to be a crucial element of the game. "Having said that, though, fusing this egg-throwing mechanic into a platformer helped us invent ideas that hadn't been possible until that point," Hino points out. "It was a real boon for ideas for the game!"

While the egg-throwing mechanic would be easy to implement in modern games thanks to the prevalence of dual analogue sticks, achieving it in *Yoshi's Island* required some ingenuity. The development team managed to hit upon an elegant solution that managed to squeeze the whole process into two button presses. By hitting the A button, the player would reveal an aiming reticule that moved back and forth along an arc in front of Yoshi – while still allowing him to run and jump freely. Hitting the A button again would cause Yoshi to throw an egg in the direction he was currently aiming for. It was the trickiest of Yoshi's skills to get to grips with as a player, but it gave the game a unique feeling amongst platform games.

One of the other things the new star allowed the Nintendo EAD team to do was make an

> **"We wanted to include egg-throwing as throwing actions weren't something that had appeared much in Mario games"**
> Takashi Tezuka

adjustment to the difficulty of the game. "Unlike the *Mario* series, we tried to give the gameplay a more gentle and relaxed pacing, as opposed to turning it into a platformer that requires players to master tricky techniques," explains Tezuka. "So, for example, there's no time limit on the stages, and it's a little easier to control Yoshi's jumps as he flutter jumps unlike Mario. As we were adding in these little adjustments, we came up with the idea of having some exploration elements as part of the gameplay and slowly the game took shape."

Sometimes the desire to provide exploration elements and a relaxed game experience were conflicting goals, as was the case when deciding on a progression system. *Super Mario Bros 3* and *Super Mario World* had both used maps that allowed the player to select the next stage. Why did the team choose to return to linear progression for *Yoshi's Island*? "We looked at many different map styles for this game. Seeing as we had already used a board game-style map system in *Super Mario World*, we settled on a linear path as a way of returning to our beginnings," Tezuka replies. "The map used in *Super Mario World* and other titles gives users the option to choose the level of difficulty when there's a branch ▶

YOSHI IN MY POCKET

How did Yoshi's greatest adventure translate to the small screen of the Game Boy Advance?

» [GBA] Colours were lightened in this portable version to account for the GBA's dark screen.

The Game Boy Advance was often seen as a perfect handheld home for SNES games, and after *Super Mario World* was successfully miniaturised, it felt like *Yoshi's Island* would be a natural successor. Nintendo delivered on that expectation in September 2002 with *Super Mario Advance 3: Yoshi's Island*, issuing a conversion that received a broadly positive reception. Many purists swear by the SNES original, but this version does have some unique content worth investigating.

The game is mostly faithful, but some changes were made in order to lower the difficulty level from the original SNES version. The countdown to recover Baby Mario is noticeably slower in the GBA game, and various minor level design changes were made such as the addition of Middle Ring checkpoints and Shy Guy spawning pipes. The original game's Extra Levels have been modified, and a set of six new Secret Levels were added. One aspect of the game was made harder, though – red coins were made visually identical to regular coins prior to collection.

Changes were also made to the game's presentation. Colours have been lightened throughout to compensate for the original Game Boy Advance's dark display, and the colouring of the Yoshis has been made more consistent with later games. The game also received a new translation. However, this version isn't quite perfect. The music and sound effects don't quite match the original quality, there's occasional slowdown and some graphical effects were downgraded too (most notably in stage 1-7, Touch Fuzzy Get Dizzy).

» [SNES] Fuzzy is probably a Class A controlled substance in the Mushroom Kingdom, judging by its effect on Yoshi…

DEVELOPER HIGHLIGHTS

SUPER MARIO WORLD (PICTURED)
SYSTEM: SNES
YEAR: 1990

SUPER MARIO KART
SYSTEM: SNES
YEAR: 1992

SUPER MARIO 64
SYSTEM: N64
YEAR: 1996

YOSHI'S (HI)STORY

A look back at Yoshi's other solo adventures...

1991 · 1992 · 1993 · 1996 · 1998 · 2001

MARIO & YOSHI
NES/GAME BOY

This puzzle game sees you swapping stacks of items to encase enemies between pieces of eggshell. It's okay, but not a top-tier game on either of its platforms.

YOSHI'S COOKIE
NES/SNES/GAME BOY

This is another puzzler, in which you mix and match sweet treats in order to create matching rows or columns. It's another game that's interesting but far from tremendous.

YOSHI'S SAFARI
SNES

In this Super Scope game, Mario rides Yoshi around rotating Mode 7 landscapes, blasting Goombas and Koopas out of the sky. It's another strictly average spin-off, too.

TETRIS ATTACK
SNES/GAME BOY

It's the excellent Japanese puzzle game *Panel De Pon*, but reskinned with a Yoshi theme that was deemed more marketable to international audiences.

YOSHI'S STORY
N64

Yoshi's second platform outing used prerendered 3D graphics and tasked Yoshi's with finding huge fruit quotas. It's fun, but a bit easy and not quite as good as *Yoshi's Island*.

YOSHI'S STORY (GBA)
GAME BOY ADVANCE

This short, looping version of the N64 game was a tech demo that was never released. However, it was shown to journalists to demonstrate the 32-bit handheld's power.

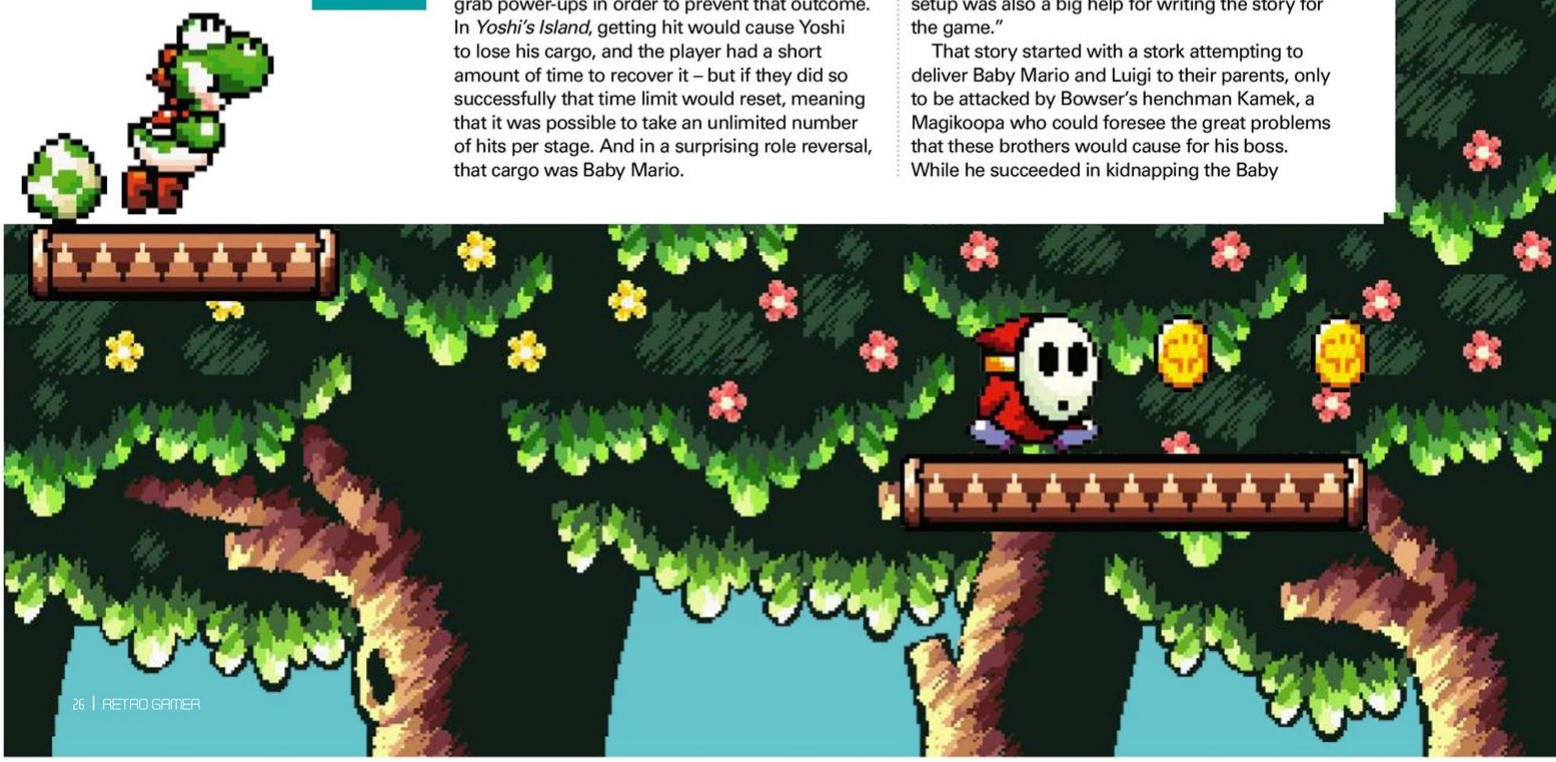
» [SNES] Get hit and Baby Mario will float off in a bubble – recover him in the time limit or the Magikoopas will get him.

in the path," adds Hino. "With *Yoshi's Island*, we designed the game so that players can play the courses over again with different objectives so they can get better. So, with that in mind, rather than users going through the game selecting what level of difficulty they want to play, as done with the board game-style maps, our intention was to make it possible for users to progress through the game by setting their own goals."

As well as the ability to set your own level of challenge, one of the key aspects of the game's gentle pacing was the ability for the player to get hit without being in too much danger. In the Mario games, the player was only ever a couple of hits away from losing a life, with finite opportunities to grab power-ups in order to prevent that outcome. In *Yoshi's Island*, getting hit would cause Yoshi to lose his cargo, and the player had a short amount of time to recover it – but if they did so successfully that time limit would reset, meaning that it was possible to take an unlimited number of hits per stage. And in a surprising role reversal, that cargo was Baby Mario.

"I don't think we started out with the intention of having the roles reversed," reveals Hino. "Once we decided to make Yoshi the lead, we thought he could have something ride on his back and so decided Yoshi's mission would be to carry something through the game. We wanted to add something extra to the traditional side-scrolling gameplay of having players just proceed to the right to reach a goal, and so having Yoshi need to carry something across the map was a good fit." That makes sense given Yoshi's original role as a mount for a certain plucky plumber, but why did Mario need to be a baby? "We decided to have Yoshi carry Mario because that's what he's always done, but we made Mario into a baby as it wouldn't make sense for the game if Mario could walk around by himself," Hino explains. "This setup was also a big help for writing the story for the game."

That story started with a stork attempting to deliver Baby Mario and Luigi to their parents, only to be attacked by Bowser's henchman Kamek, a Magikoopa who could foresee the great problems that these brothers would cause for his boss. While he succeeded in kidnapping the Baby



2004 — 2005 — 2006 — 2014 — 2015 — 2019

YOSHI'S UNIVERSAL GRAVITATION
GAME BOY ADVANCE

This platformer was developed by Artoon, and had a gimmick in which you could tilt the playfield using a tilt sensor. Unfortunately, it was very poor.

YOSHI TOUCH & GO
DS

This experimental game saw players drawing on the touchscreen to guide Mario to Yoshi, before controlling Yoshi's egg-throwing in scrolling segments.

YOSHI'S ISLAND DS
DS

This sequel to *Yoshi's Island* retains the style and mechanics of the SNES game, but adds new babies – Peach, Donkey Kong, Wario and Bowser now join Mario.

YOSHI'S NEW ISLAND
3DS

While it tried to follow the success of the previous *Yoshi's Island* games, this 3DS outing was a bit too easy and bland to make the same impression as its predecessors.

YOSHI'S WOOLLY WORLD
WII U

This platformer sports a knitted aesthetic and offered a pretty good time, particularly when played in co-op. The 3DS conversion is known as *Poochy & Yoshi's Woolly World*.

YOSHI'S CRAFTED WORLD
SWITCH

Woolly World's success earned Good-Feel the opportunity to do another platform game. Read more about it on page 30.

> **"We spent a lot of time trying to come up with a new and different look for the game"**
> Shigefumi Hino

Luigi, Baby Mario was lost in the confusion and fell to Yoshi's Island. With the instinctive bond that brothers have, Baby Mario could sense his brother's location, and the Yoshis decided to take him to rescue Baby Luigi and reunite them both with their parents. And for those of you unfamiliar with the game, that plural is no typo. "One of the ideas that came out while we were creating the story, and which I'm particularly taken with, is that there are many different Yoshis in the game," says Tezuka. "Normally, the lead character is a singular character in the game world, so personally I thought the idea of having different Yoshis working together and taking turns to carry Baby Mario through the game was really interesting."

This storybook presentation plays well with the game's aesthetic – it sports a hand-drawn, colouring book style with crayon backgrounds. While this wasn't the plan from the start, the idea of being visually unique was one of the team's aims. "We spent a lot of time trying to come up with a new and different look for the game. We tried out many ideas and the most interesting was one I drew as a last-ditch attempt: a cloud that had this very rough scribbled look to it," explains Hino. "Everyone agreed it was perfect and so we decided to go ahead with giving the game a hand-drawn look. At the time, there were a lot of other beautiful graphics out there, and we wanted to differentiate our title from these. I also watched a lot of children's TV shows as well for inspiration."

That wasn't the only reason that the Nintendo EAD team ultimately chose to use a deliberately low-tech look. "At the time, our company was abuzz with talk of the graphics used in Rare's *Donkey Kong Country*. There was definitely a feeling that those sorts of visuals might go on to become the mainstream. I wanted us to come at things from a different angle," says Tezuka. "Although there were some people in the company who were expecting us to follow *Donkey Kong Country*, a decision was taken that we should put our weight behind a completely different sort of visual look," adds Hino. "It was around about the time that we decided on that direction that Mr Hisashi Nogami joined the company as a designer. As we were competing together and having fun coming up with different designs, we slowly settled on the feel we wanted the visuals to ▶

» [SNES] Although *Yoshi's Island* has a gentler pace, there are still challenges like tricky moving platform paths.

> **“We competed in the team to see what were the most amusing or fun things we could draw”**
> Takashi Tezuka

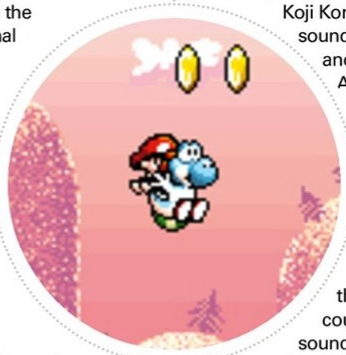
»[SNES] This snowball gets bigger as you roll it, and can wipe out enemies in its path.

have.” In a 2018 interview with *Kotaku*, Nogami mentioned the game’s hand-drawn look was actually achieved quite literally – images were drawn by hand, scanned and recreated as pixel art

Of course, the ironic thing is that despite that rejection of *Donkey Kong Country*’s look, *Yoshi’s Island* was a game that did things that few other SNES games could. It’s something that isn’t lost on the developers. “*Yoshi’s Island* has this very warm and friendly feel to it, but a lot of technical effort went into making the game,” they note. “It’s actually one of the later SNES games, so [it] makes use of all the developmental know-how we’d built up to that point, as well as what was considered the latest in technology with the Super FX 2 chip.”

The use of the enhancement chip is a curious one, and we were interested to know where the decision to use it came about. “In principle, we look at what the software and hardware can do and look at what sorts of visuals or gameplay we can create with that technology. It was mentioned one day that the Super FX 2 technology was available, and a suggestion was made about using it,” explain the developers. “We were very excited and decided to make use of it for two reasons: the first was that as software developers we wanted to use all new technology we could, and the other point was that this technology offered further gameplay and visual possibilities (eg, object (sprite) rotation and a large increase in the number of screen colours possible).”

What was so interesting about the use of the Super FX 2 chip? That would be the way it was deployed – the original chip, designed by the UK team at Argonaut, had been used to power the polygonal graphics of *Starwing*. All of the subsequent Super FX games, like *Stunt Race FX* and Vortex, had been 3D games too. Few gamers would have guessed that the first outing of the updated version would be in a 2D game, but it proved key to some of the most impressive visual effects in *Yoshi’s Island*. Some of those were actually polygonal special effects, such as falling walls and rolling platforms. But the Super FX 2 was primarily used here for manipulating 2D sprites, a technique that Nintendo called ‘Morphmation’ in advertising. As well as adding extra layers of parallax scrolling, the chip allowed the console to handle multiple rotating sprites on the screen, perform some psychedelic background warping and even squash and stretch sprites. These were most frequently used in the game’s boss battles, which routinely featured some absolutely colossal sprites.



Koji Kondo was behind the game’s sound and music, and delivered another set of memorable themes. Although still present, there was less focus on the bongos and other additional percussion that had marked Yoshi’s presence in *Super Mario World*, and there were some pretty bold musical choices – most notably the music box tune that played during the game’s intro sequence. Of course, the most memorable sound in the game was that of the crying Baby Mario, which triggered whenever he was separated from his dinosaur guardian – we’d avoid getting hit just to make sure that we didn’t hear it. The Japan-only official soundtrack CD is now a prized item in its own right, with used copies selling for extraordinary prices.

DINOSAUR DISTRACTIONS

Yoshi’s Island has six bonus games and four mini battles – here’s the complete guide to them

▲ DRAWING LOTS

■ This game’s the simplest of the lot – you pick one of the six cards, and receive whatever’s on it. If you reveal Kamek, you get nothing.

▼ FLIP CARDS

■ Flipping cards on this board reveals items. If you reveal Kamek, you’ll lose the lot, but flipping seven good ones wins you ten lives.

▲ MATCH CARDS

■ This is a simple game of pairs in which you can win items. You’ll need a good memory, since you’re only allowed to make one mistake.

▼ ROULETTE

■ This one’s dangerous – you can wager lives in order to add extra lives, or even multiply your life total. You can triple it, but you might lose everything!

▲ SCRATCH & MATCH

■ It’s a scratchcard! The more Baby Marios you reveal, the more lives you get – one for one, two for two and five for three.

»[SNES] You're not going to get past the massive Nep-Enut by jumping, so it's best to feed him an egg.

Yoshi's Island was released in August 1995 in Japan, and releases in North America and Europe followed in October 1995. The game received universal acclaim upon its release. *Nintendo Magazine System* gave it 97%, with Simon Clays commenting that it was "about the best game I've ever had the pleasure to play," with his only complaint being that the graphics were "slightly immature". Tony Mott awarded the game 94% for *Super Play* and praised it for its variety, noting that "You never know what's just around each corner, but you know that it'll be something worth seeing." However, he felt that the game's linear progression was disappointing by comparison to *Super Mario World's* wealth of secret exits and stages. *Edge*'s review scored the game 9/10, crediting the Super FX2 chip with "some wonderfully inventive touches which make each new level a reward to the player."

The game was later converted to Game Boy Advance as *Super Mario Advance 3: Yoshi's Island*, and that version has since been made available for 3DS and Wii U. Of course, despite Yoshi's solo success Mario was soon back on top. Although the developers felt that they'd pushed Mario to his 2D limit, new hardware meant that Nintendo had already figured out what to do with its headline star. Less than a year later, Mario returned in the groundbreaking *Super Mario 64*, which many of the *Yoshi's Island* staff also worked on. But as a swan song for an era in which 2D gaming was still the primary concern of the world's most prominent game developers, you couldn't ask for much better than *Yoshi's Island*. The game established Yoshi as a platform star in his own right and is still considered to be one of the greatest of all time, frequently showing up in lists of the best games ever, including Games™'s top 100 in 2010 and our own readers' top 150 in 2015.

With that in mind, we'll leave the last word to the developers – why do they think that the game is still so beloved by players? "I think maybe it has something to do with the appeal of the gameplay; Yoshi offers this unique ability to gobble up enemies, turn them into eggs, and then throw those eggs," says Tezuka. "For the *Yoshi* series, we wanted to convey Yoshi's warmth of character. The adorable voice and our leaning towards hand-made visuals has all added up to create the character's uniqueness, and I think it's maybe these things that players are drawn to."

"It wasn't easy creating Yoshi or *Yoshi's Island*," says Hino. "We competed in the team to see what were the most amusing or fun things we could draw, and laughed together as we thought up strange enemies and level features, knowing we had a bit more freedom to do so because it wasn't a Mario game. Even the programmers jumped on board and worked really hard to achieve our ideas. I think the fondness people have for the character and the game is because we managed to give form to all this passion we had. A long time has passed since then, but even now designers continue to develop Yoshi with all kinds of different interpretations, such as handicrafts, worlds made of yarn and so on. I'm really happy to see people still continuing to enjoy playing with Yoshi." ★

MORPHIN' TIME

Yoshi can take five different forms after entering a Morph Bubble – but what do they all do?

CAR ▸

■ Four wheels are faster than two legs. In this form Yoshi can also dodge enemies and reach greater heights by adjusting his wheels' suspension.

◂ HELICOPTER

■ Who needs a blue winged Yoshi when you've got rotor blades? This form can fly freely through the air for a limited time, though you do need to beware of inertia.

MOLE TANK ▸

■ We really *dig* this particular transformation. [*Nick, please collect your P45 from reception – Ed.*] As you'd expect, it allows Yoshi to create tunnels.

◂ SUBMARINE

■ This one's a bit of a belter – not only does Yoshi get freedom of movement underwater, he also gets the ability to fire torpedoes at his enemies.

TRAIN ▸

■ Becoming a train allows Yoshi to travel along tracks. Thankfully realism is left to one side, so it doesn't cost him all his coins and he's never replaced by a bus.

▼ SLOT MACHINE

■ This fruit machine will give you extra lives if you can match the symbols on the reels. You don't even need to pay 10p to play – bargain.

▲ GATHER COINS

■ Coins are fired out of a cannon high above the arena, and it's your job to collect them. You can jump on your opponent to hinder them, too.

▼ POPPING BALLOONS

■ Your job is to pop these baloons to try to find a hidden item before your opponent does.

▲ THROWING BALLOONS

■ Input button commands to throw a water balloon at your enemy. If it pops in your hands, you lose!

▼ WATERMELON SEED SPITTING CONTEST

■ Battle against a foe by shooting watermelon seeds at them.

Yoshi's Crafted World

In 2015, Nintendo and Good-Feel reinvented Yoshi by giving him a yarn-filled world to explore. Etsunobu Ebisu explains why his team swapped out yarn and cloth for their incoming exclusive Switch sequel

Words by Darran Jones

» Etsunobu Ebisu is Good-Feel's executive vice president. He is a producer on *Yoshi's Crafted World*.

IN THE KNOW

- » **PUBLISHER:** NINTENDO
- » **DEVELOPER:** GOOD-FEEL
- » **RELEASED:** 2019
- » **PLATFORM:** SWITCH
- » **GENRE:** PLATFORMER

If Yoshi has proven one thing since his debut in the 1990 hit *Super Mario World* it's that he's not afraid to try something new. He's featured in puzzle games on the NES, was the star of a fun Super Scope shooter on the SNES and even had players furiously twisting their Game Boy Advances in *Yoshi's Universal Gravitation* – though that last one was something of a disappointment.

He's admittedly never been as high-tier as some of Nintendo's bigger stars, but like Kirby he's incredibly versatile and likable, and he's been known to have plenty of cosmetic makeovers throughout the years. Perhaps the most impressive was in 2015 when Nintendo released *Yoshi's Woolly World*. It immediately stood out thanks to its delightful aesthetic, which saw a knitted Yoshi exploring a similarly yarn-created world alongside his lovable dog, Poochy. Developer Good-Feel has pushed the envelope further for its sequel by giving its game a more distinct handcrafted look. "I think everyone has tried making handicrafts at some time or other," explains Etsunobu Ebisu, who is working as a producer on *Yoshi*'s new game. "Children will have, of course, but even adults probably have some experience from their childhood, so it makes for a good theme for parents and children to play the game together. Maybe a father playing along with their child might see the back of an object and realise it's actually made from a milk carton, sparking a conversation about how he used to make things like this when he was young. Using crafts for the visuals also makes it easy for players to imagine what's involved for a level feature, even if it's their first time seeing it. I really hope everyone, even those who aren't so familiar with games, will give *Yoshi's Crafted World* a try."

The idea of *Yoshi's Crafted World* appealing to various generations is an intentional one on Good-Feel's part as Ebisu and his team have designed their game to be one that really comes alive when played with someone else, regardless of their experience with games. "For multiplayer, we envisaged the game being played by someone who's familiar with games and someone who isn't so familiar, perhaps a parent and child," continues Ebisu. "We introduced the powerful carrying mechanic with that in mind. The player being carried throws the eggs, while the player doing the carrying handles moving the Yoshis. In this state players can throw as many eggs as they want, and ground pounds will unleash a shockwave that shakes the whole screen. It's a whole different sort of fun than you get when playing

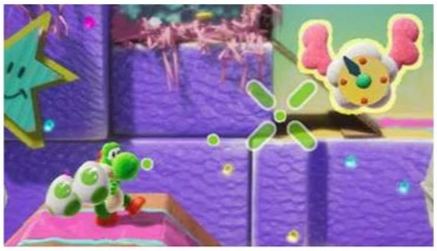
» [Switch] This sequence showcasing a prehistoric Dry Bones made resident dinosaur enthusiast Darran very excited.

» *Crafted World* sports a neat 'plushy' style of art when it comes to its eclectic cast of Yoshi characters.

single player. The multiplayer is much wackier than the single-player, so it was a lot of fun for us to create. Unfortunately, it's also easy for bugs to crop up there, too, and the final debug was quite a challenge. I'm really grateful to the testing team for testing the game out with all kinds of different playstyles."

Alongside its multiplayer mode, one of the most impressive aspects of *Yoshi's Crafted World* is how the stages constantly unfold and twist about, which allows Yoshi to uncover new areas and items as he goes about his quest. It's a fantastic-looking effect that builds strongly on the handcrafted theme of the game, but it certainly wasn't easy for Ebisu and his team to implement. "It was incredibly difficult!," he admits. "As I mentioned, the crafts are fairly realistic, so players can imagine how a level feature will work just by how it looks. To give an example, on the first stage, there's a mechanic where a house transforms into a bridge. We actually had to make this for real to try and figure out what we would need to do to achieve this transformation in game. Another issue is that although the world is full of many different kinds of handicrafts, there aren't actually so many that can be used just as-is in a game. It caused us many a headache trying to come up with handicrafts you'd want to play with in a game."

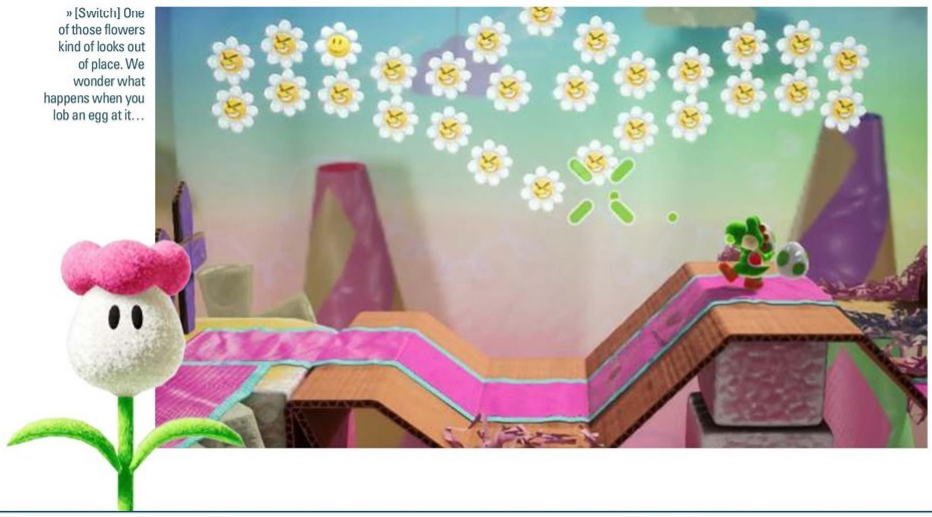
Equally challenging for Ebisu's team has been the design of each level. While Yoshi can continue to lob his eggs at enemies, he's now able to throw them both into and out of the screen, meaning that Good-Feel has had to put a little more thought into how each stage can be interacted with. "*Yoshi's Crafted World* is a 2D platformer with a certain degree of depth back into the screen," explains Ebisu. "Sometimes the items and



» [Switch] The tried-and-tested *Yoshi* design established in *Yoshi's Island* is present and clear to see.

level features placed at the back of the screen will play a part in beating the stage, and sometimes they may be collectable items. The handicrafts in the background aren't just there to look pretty; we've also given them a role to play too!"

You can get a taster of *Yoshi's Crafted World* thanks to the demo that's currently available and it not only highlights the ingenuity of Ebisu's team, but also proves that there's plenty of life left in Mario's favourite steed. It's a gorgeous-looking game, too thanks to that stylish aesthetic and the typical quality control and detail that goes into Nintendo's games. "In order to give a sense of realism to the handicrafts as well as bring out the warm fantasy atmosphere, we spent a lot of time in research for shaders," concludes Ebisu. "We also had to maintain 60fps as it's a 2D platformer, and so we were tuning the game right up until the very last minute." It's unclear what's next for Nintendo's painfully cute dino, but we imagine that whatever happens the end result will be anything but conventional. ✱



» [Switch] One of those flowers kind of looks out of place. We wonder what happens when you lob an egg at it…

DINO DYNAMICS

Things to do in Yoshi's Crafted World

HE'S BEHIND YOU!

■ You've got to be more aware of your surroundings in *Yoshi's Crafted World* as it's possible to shoot eggs in all directions. Needless to say, shooting things in the background will trigger new paths and items, as well as uncover elusive coins and flowers to collect.

POOCHY POWER

■ Yoshi's faithful companion returns in *Crafted World*. He appears as a nice distraction from the main game, requiring you to find scattered versions of him that need to be collected. He'll dutifully follow you around once he's been found.

PLAYING WITH FRIENDS

■ A lot of time has been put into *Crafted World*'s multiplayer to ensure that it caters to all audiences. If you've never played a *Yoshi* game before then grab a friend and jump in at the deep end, safe in the knowledge you'll have plenty of on-screen support.

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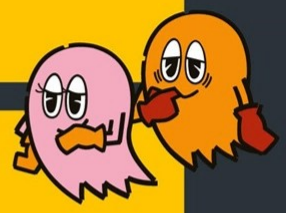

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THE EVOLUTION OF HEAD OVER HEELS

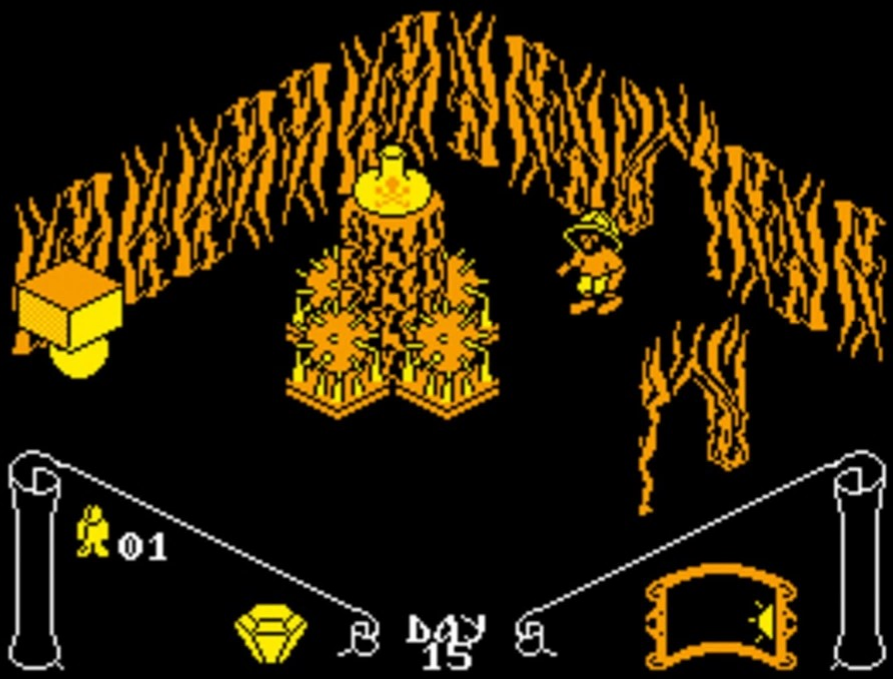
Jon Ritman and Bernie Drummond's Head Over Heels is an isometric classic, but it evolved from the pair's previous adventure and it influenced their subsequent ones, as Jon, Bernie and Rare's Paul Machacek explains

Words by Rory Milne

Jon Ritman created his chart-topping *Match Day* based on requests from publishers at a computer show, but before this happened, Ultimate had completed its groundbreaking isometric adventure *Knight Lore*, which it subsequently held back for the best part of a year. An earlier release of *Knight Lore* might have changed Jon's plans, however, as the developer is quick to point out. "If I had seen *Knight Lore* before I went to that show, I would probably never have asked publishers what they were interested in, so *Match Day* might never have happened. I would have done something isometric whether I had the *Batman* licence or not, because as soon as I looked at *Knight Lore* I thought: 'Oh god, I want to do that!'"

But although Jon knew that he had to develop his own take on the Ultimate game-changer, he realised that he would need the help of someone who could match Tim Stamper's *Knight Lore* visuals, and so he recruited an artistic friend. "*Knight Lore* had little influence on my graphics directly," Bernie Drummond notes. "I had been asking Jon why computer game graphics were not professionally cartoon-like, and Jon explained the limitations of the memory – until he saw *Knight Lore*. He then showed me it and asked: 'Can you do that?' And I said: 'Yes, and better.'"

Looking for a hero to rival *Knight Lore*'s Sabreman, Jon and Bernie considered various options, and although *Knight Lore*'s medieval setting didn't inspire a medieval protagonist, its alternating characters gave Jon an idea that he stored away for later. "I was tossing ideas around, for instance – Norse gods, Thor," Jon remembers, "but I didn't think about medieval themes at all. I did like the idea of Sabreman changing into a werewolf; that whole concept was clever. Although I didn't think it was really exploited. My first thought was: 'Well, surely he's going to have different abilities when he changes?' But actually, they were pretty much the same."



» [Amstrad CPC] Some of *Knight Lore*'s puzzles better suit the Wulf, as it can guide blocks on balls more easily.

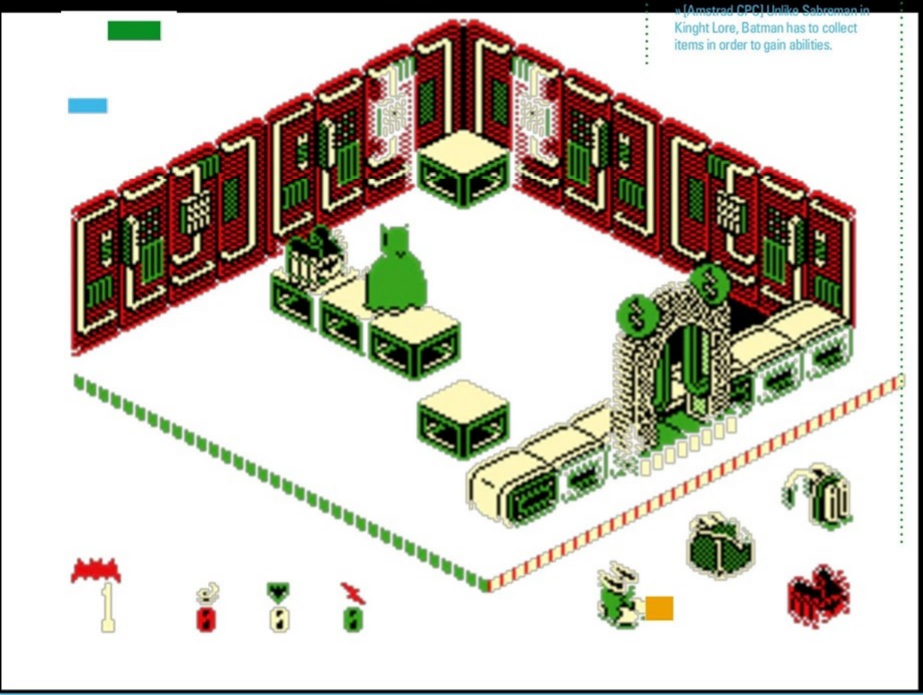
» Jon Ritman left the games industry some time ago, but remains fond of his isometric adventures.

Putting this on the backburner, Jon focused on finding a solo character, and after discussion with Bernie he opted for Batman. "Originally Jon was nervous of using an established character," Bernie reflects, "only after discussing it with Ocean did he relax. There was no storyline in *Batman*. I just produced cute graphics, and Jon crunched it all together as to appear seamless."

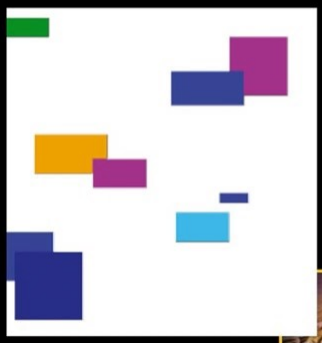
The combination of Bernie's beautiful, strange visuals and Jon's fiendish puzzles backed by a popular hero ensured that *Batman* was a hit, and its collectible power-ups and save game pick-ups stood out as advances on *Knight Lore*. So why didn't the duo put DC's Dark Knight in a sequel? "The *Batman* films came out, and suddenly the games were tied into being like *Batman*, and I didn't want that tie," Jon reasons. "I didn't want to be withheld by someone else's set of rules. When we did *Batman*, we had creative freedom to do whatever we wanted, and that was cool."

If anything, the creative freedom enjoyed by Jon and Bernie on *Batman* increased as they started their second isometric adventure, although their publisher required some convincing. "Jon encouraged Ocean to have faith in *Head Over Heels* as an expression of my bizarre imagination and artwork," Bernie recollects, "thankfully I didn't let him down. *Head Over Heels* – originally called *Foot And Mouth* – was much easier for me, as confidence from doing *Batman* had 'released the kraken', so to speak."

While Bernie was taking confidence from *Batman*, Jon was expanding on *Knight Lore*'s dual hero mechanic. As with *Batman*, Jon gave his new characters abilities, including a weapon, unlike the Caped Crusader, who had done without his Batarang. "I wanted two characters for *Head Over*



» [Amstrad CPC] Unlike Sabreman in Knight Lore, Batman has to collect items in order to gain abilities.



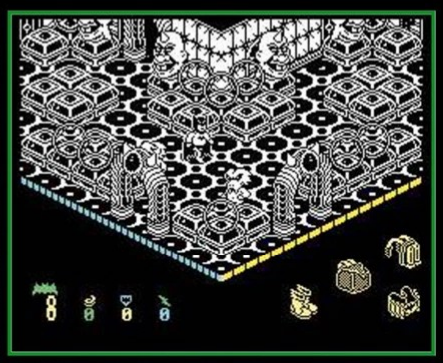
» As well as making films and music, Bernie Drummond creates beautiful artwork like this stunning self-portrait.

▶ *Heels*, and you had to have them doing different things," Jon explains, "Firing doughnuts just seemed suitably silly. I didn't think of firing things at the time of *Batman*. I could have done that, but the game worked well as it was."

Head Over Heels also enjoyed other differentiations, including a remote-controlled Dalek with a face like Plug from *The Beano*, which evolved from a mechanic in *Batman*. "In *Batman* there was a little spinning-top thing that you could jump on top of," Jon observes. "Its job was to aim at you, so if you moved your character it tried to move in that same direction. So in effect you were steering it. The idea of the Dalek in *Head Over Heels* appealed to me as a double-layer, where you were using the joystick to control something that used a joystick to control something else!"

Evolutions in Jon's code subsequently saw *Head Over Heels*' room count far exceed its predecessor's, and so he introduced a hub world with a teleportation mechanic. "Because *Head Over Heels* was twice the size of *Batman*, I thought it would be quite nice if you could dip into the different parts of it," Jon recalls, "and if you got stuck because you couldn't work something out, well, you always had the other bits. So that was the basic idea behind the Moonbase."

» [Amstrad CPC] *Superhero*'s switch-guided cubes are directly inspired by *Head Over Heels*' remote-control Daleks.



» [MSX] *Batman* on the MSX looks like the ZX Spectrum original, but it sounds like the Amstrad CPC 464 port.

A second concession to *Head Over Heels*' greater difficultly resulted in Jon curbing his *Batman* follow-up's more challenging rooms. "I would frequently say: 'Okay, this one's a bit difficult, I'll give players an alternative route,'" Jon notes. "What I would try to do was I would make one physical problem and one mental problem within each room to give players a choice, and when you went into a room everything you needed was in that room. I did stray a bit from that later with *Monster Max*, but overall you were never far away from what you needed there either."

Monster Max would be the next isometric adventure that Jon worked on after *Head Over Heels*, but during *Head Over Heels*' development, Jon also oversaw an isometric project designed and coded by a teenage developer. "Paul Machacek was a young kid, and he was clearly

STAGES OF EVOLUTION: Controllable Assets

From moving blocks to spinning tops to remote-control Daleks

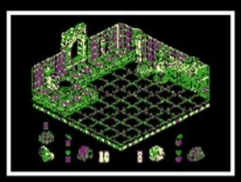
KNIGHT LORE

■ There are rooms in *Knight Lore* where square blocks move about on balls that Sabreman or the Wulf can jump on and guide around by walking in different directions. Standing on the blocks gives the heroes extra height to reach high-up items or exits, but baby steps are required when steering them, as it's easy to fall off.

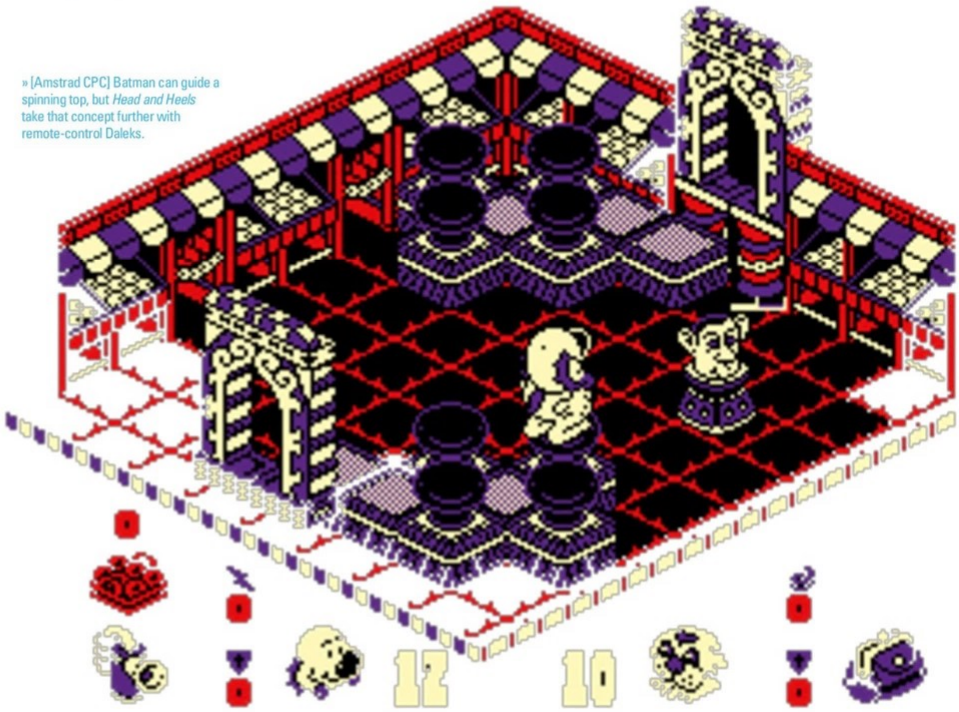
BATMAN

■ Similar to *Knight Lore*'s mobile blocks, there's a spinning top in *Batman* that can be ridden around on by making small movements in different directions. Using the top, you can get Batman safely across a room that's guarded by a deadly foe, but try to stay dead centre of it as any contact with obstacles costs you a life.

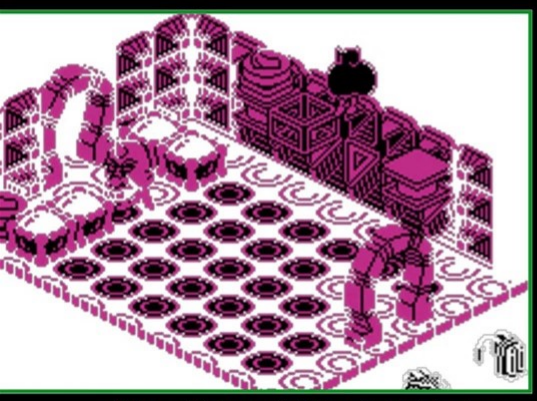
HEAD OVER HEELS



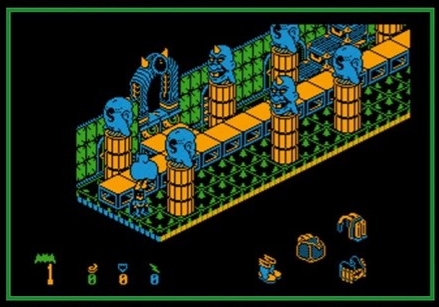
■ Rather than steering something around by standing on it and moving in the required direction, in *Head Over Heels* you remotely control Dalek hybrids with directional levers. You can use the Daleks as stepping stones over hazardous surface areas, where you jump on to them and then hop off them to where you want to get to.



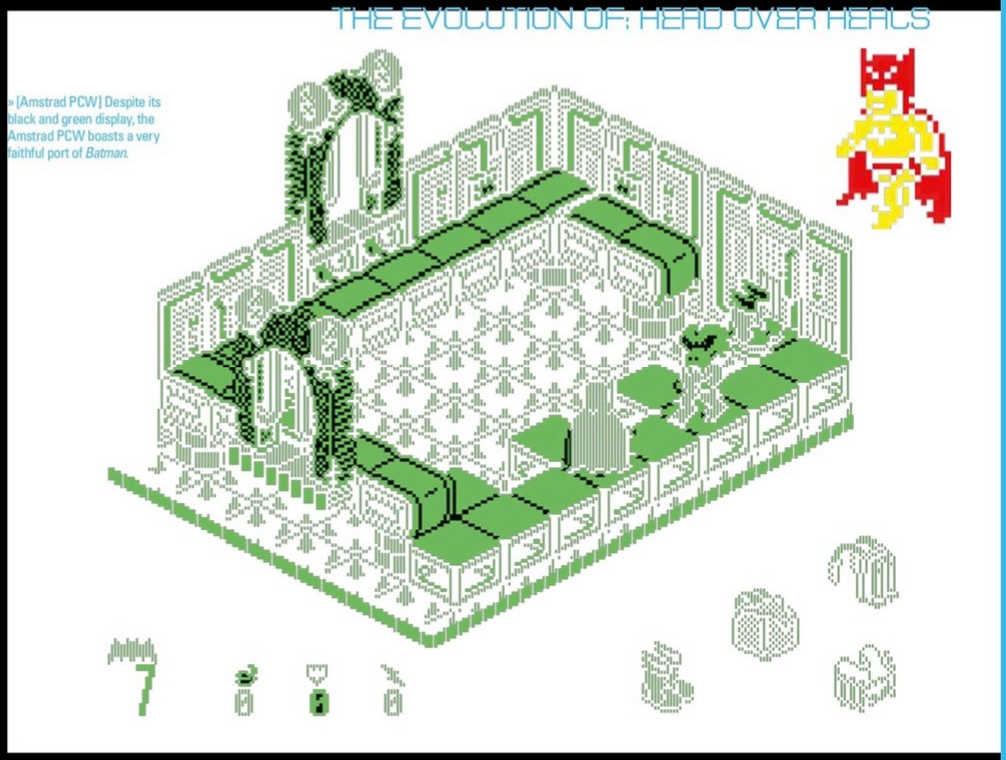
» [Amstrad CPC] Batman can guide a spinning top, but *Head and Heels* take that concept further with remote-control Daleks.



» [ZX Spectrum] The Speccy original of *Batman* plays identically to the more colourful CPC 464 version.



» [Amstrad CPC] As well as permanent abilities, Batman can also obtain temporary power-ups represented by tiny effigies.



» [Amstrad PCW] Despite its black and green display, the Amstrad PCW boasts a very faithful port of *Batman*.

quite talented," Jon considers. "He had already written code for *Superhero*, he just needed somebody to help him with the graphics. So I suggested that he might like to work with Bernie, and that's how that came about."

Looking back to his first meeting with Jon and Bernie, Paul recognises the influence that the pair's games had on the design of his own isometric title *Superhero*. "I was a huge fan of Ultimate, and was influenced by *Knight Lore*," Paul enthuses. "So when I visited Jon, and he and Bernie showed me the new game they were working on – *Head Over Heels*, I was hooked. Obviously I could see how Jon was progressing beyond *Batman*, which I had loved playing prior to meeting him. So I finished the title I was working on and decided that I really wanted to tackle an isometric game."

"I would make one physical problem and one mental problem within each room to give players a choice"

Jon Ritman

As Paul started putting together ideas for *Superhero*, Jon and Bernie were finishing work on *Head Over Heels*, which quite rightly caused quite a stir on its release. "*Head Over Heels* was my best 8-bit work, " Bernie beams. "The public reaction was that the graphics were far better than *Batman*, and if not for the release of *Sentinel* with its 3D scrolling scenario *Head Over Heels* would have been voted 'Best graphics of the year' in at least one publication."

Bernie didn't have too long to savour these plaudits, however, as Paul soon required the artist to visualise hybrid gameplay that would take Superhero to places that *Head Over Heels* hadn't gone. "Ultimate had moved on from static puzzle rooms in *Knight Lore* to creating scrolling isometric environments devoid of puzzles," Paul points out, "but I couldn't see why the two systems couldn't be compatible, with navigable scrolling corridors full of monsters connecting static puzzle rooms."

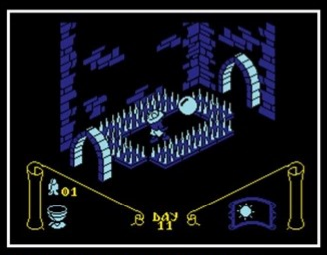
But unlike Paul's previous titles, which he had created the graphics for himself, he now had access to arguably the most imaginative computer games artist of the day. "The key influence that *Head Over Heels* had on *Superhero* was Bernie's art style," Paul acknowledges, "I gave very little direction. I loved Bernie's work, he knew the genre that the game would be in, and it was more a case of me saying: 'We need a main playable character, some bad guys, a selection of props and obstacles, and some décor for the rooms.' Bernie kept sending me stuff and I loved it. All of it. It was really hard not to use something, to be honest."

But the influence of *Head Over Heels* on *Superhero* was far from just aesthetic, and this could be seen most obviously in Paul's use of collectible abilities in his game, although he decided against employing an alternating

» [C64] *Superhero*'s beautiful visuals are squashed in the C64 version, and it suffers from gameplay concessions, too.

STAGES OF EVOLUTION: Alternating Characters

How Head Over Heels took Knight Lore's unique dual hero mechanic and turned it into the focus for its game

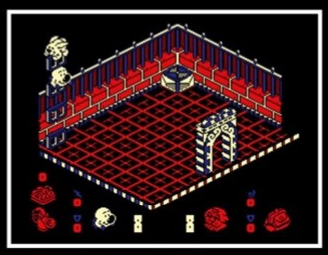


SABREMAN AND WULF

■ It often makes no difference which of *Knight Lore*'s dual identities you play as, but some bouncing balls assault the Wulf and some ghosts attack Sabreman. Moving blocks travel in the direction the Wulf moves, but in the opposite direction of Sabreman's movements, and only Sabreman can safely enter the wizard's chamber.

BARK AT THE MOON

■ Changes between Sabreman and the Wulf are beyond the player's control, and occur every sunset and sunrise. During these transformations, your character is vulnerable to attacks, and character swaps that occur halfway through manoeuvres – like a timed run under a falling hazard – can also prove fatal.



HEAD AND HEELS

■ Head and Heels can be swapped at any time, and the two heroes have unique talents. Head can jump higher and further and can change direction mid-jump, where as Heels can run faster. Although if Heels picks up a 'Jump higher' bunny he can boost his leaps, and Head gets a speed bump if he picks up a 'Go faster' bunny.

IN TWO MINDS

■ Some puzzles require Head's skills to solve and some require gifts only Heels possesses. For example, strange creatures called Hush Puppies teleport away from Head, but allow Heels to use them as staircase. Other challenges require the pair to work together or combine as a single character with both heroes' abilities.

character mechanic. "Jon was doing something really interesting with the two characters of Head and Heels, and how they interacted and complemented each other," Paul muses, "but I was more tech-focussed and was content to do a more traditional thing where the player character was augmented by collectible objects that would increase his abilities. Jon had taken a step with the two characters that was unique, and I didn't just want to copy that, even though I loved the idea and it was a lot of fun playing the unfinished game when I saw it. I was also aware that if I'd somehow had multiple characters swapping or transforming between themselves that it would have slightly mirrored the transformation in *Knight Lore*."

Besides *Superhero*'s player character mechanics, *Head Over Heels* also inspired Paul to give thought to the accessibility of the rooms in his game. "An element that I included was that you could go into a segmented room, possibly with another exit so that it was a corridor, and in the inaccessible part there were doors – and even collectibles or objects to interact with," he explains. "That way you could see places of interest that you hadn't yet discovered, which you would have to find another route to. That was an aspect that Jon had used in *Head Over Heels*."

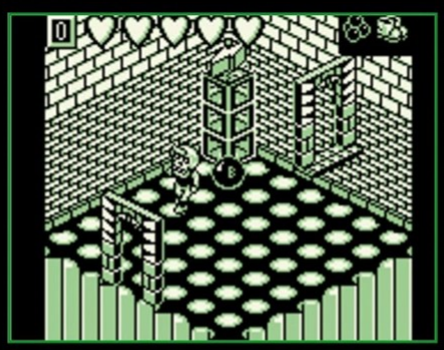
Other elements of Jon and Bernie's games also made their way into *Superhero*, including some of their visuals, although Paul can't remember if his game's hero – Thor – dated back to before Batman became the star of the pair's isometric debut. "I'm reasonably sure that some of the artwork in *Superhero* was unused content Bernie had done for *Batman* and/or *Head Over Heels*," Paul ponders, "so it may be that *Superhero*'s Thor character artwork was an existing character that Bernie already had but that had not been used."

On the question of *Superhero*'s Norse god protagonist, Bernie is fairly sure he created it for Paul's game rather than in pre-*Batman* times, but he's certain that he armed Thor. "Working with Paul was an aside that Jon arranged for us," Bernie says of working on *Superhero*. "I drew Thor, and I came up with the hammer throwing idea, and it all just came together. Paul then negotiated his own deal with Codemasters."

Superhero reviewed well and secured a position for Paul at Rare. Jon and Bernie contracted with the firm at this point, but a few years later, Bernie dipped out of the industry. "I was off teaching companies how to run factory lines and warehouses – for a pittance," Bernie sighs. "Then Jon got hold of a Game Boy and realised he could quickly jury-rig his code to fit it. For me, the problem was reducing the detail in the graphics so that they remained clear at the reduced size – that's why they didn't have my usual style."

The title and hero chosen for Jon and Bernie's Game Boy project were based on a doodle Bernie had done of an aspiring galactic rockstar, who Jon felt should go solo rather than being half of a double act. "It would have gotten confusing to have players switching between two big sets of abilities in *Monster Max*," Jon says. "Also, it was hard enough just getting an isometric game on

» [Amstrad CPC] *Super Hero* was published by Codemasters and became a solid addition to its budget range.



» [Game Boy] There are no Daleks in *Monster Max*, but there's a rather cool joystick-controlled robot.

» [Atari ST] The Atari ST Head Over Heels retains the 8-bit original's gameplay while making aesthetic improvements.

» Paul Machacek still works for Rare, but is now a test manager rather than a developer.

> **"I had suffered at the hands of other people's graphical demands, and I would've hated doing the work"**
> Bernie Drummond

the Game Boy! You didn't have a high-resolution screen, and you just had four shades of green."

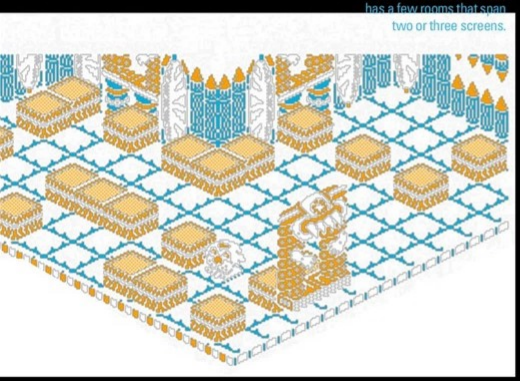
Despite the Game Boy's limited palette, Jon took ideas from *Head Over Heels* far further in *Monster Max*, such as the size of its multiscreen rooms. "I could have done larger multiscreen rooms in *Batman* and *Head Over Heels*, but they both completely filled my available memory," Jon concedes. "Where as in *Monster Max*, I had tons more memory. I knew I could make the gameplay better by having bigger rooms, because more variety in the shape of the environments meant you could do more stuff."

Another evolution of sorts saw Max given lethal weapons, where Head had fired harmless doughnuts and Batman had been unarmed. Was Jon making his isometric games more violent? "I don't think you could call *Monster Max* violent," Jon argues, "and you could just freeze things for a bit with the doughnuts in *Head Over Heels*. I was just trying to come up with things to use as tools to give as much variety as possible, so I could create different problems for players to solve."

There were also problems getting *Monster Max* released, but as Paul explains, it was warmly received, despite its delay. "By the time *Monster Max* was being written, isometric games had run their course in the UK, but by doing it on a Nintendo platform it got a wider world release and introduced isometric to new audiences."

Bringing isometric adventures to the wider world was something that Nintendo was keen on, so much so that it showed interest in *Monster Max* being reworked around its characters, although Bernie wasn't aware of this at the time. "It would've been a great opportunity to go further in the industry, so I would've gone along with it," Bernie says. "The problem was that I had suffered at the hands of other people's graphical demands, and I would've hated doing the work."

When asked about the possibility of pitching Nintendo an follow-up to *Monster Max* based around Mario, Jon Ritman is typically self-deprecating, and he finishes by strongly hinting that perhaps that would have been one evolution of *Head Over Heels* too many. "Yeah, what an idiot, eh? Why didn't I go for that?" Jon laughs. "It didn't cross my mind. I think it was because Domark were offering me quite a lot of money up-front to work for them! Also, I thought: 'I'm done with this sort of game.'" ★



» [Amstrad CPC] Like *Batman*, *Head Over Heels* has a few rooms that span two or three screens.

STAGES OF EVOLUTION: Collectable Objects

How collectibles evolved across Knight Lore, Batman and Head Over Heels

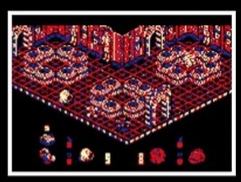
KNIGHT LORE

■ Besides being useful for standing on in order to make jumps to high-up positions, the collectible objects in *Knight Lore* have to be taken to the wizard's room in the order dictated by a magic cauldron and dropped in. The cauldron requires 14 objects in total to lift the lycanthropic curse put on Sabreman by the wizard.

BATMAN

■ Rather than collectibles, *Batman* has four distinct power-ups that are required to solve puzzles, which is essential to making progress through the game. There's a Batbag for storage, Batboots for jumping, a Bat-thruster to switch directions mid-leap and a Batbelt to facilitate longer jumps.

HEAD OVER HEELS



■ *Head Over Heels* takes *Batman*'s collectible power-ups further by restricting Head to using a doughnut-firing hooter and Heels to using a bag. Solutions to some puzzles depend on Head and Heels using the abilities these objects give them, which makes swapping back and forth between the heroes an essential part of the game.

BBC Micro fact

■ With the use of the BBC Micro Teletext Adapter, it was possible for users to download 'telesoftware' through the BBC's Ceefax service from 1983 until the transmissions ended in 1989.

PROCESSOR: MOS TECHNOLOGY 6502A CPU (2MHZ)
RAM: 32KB SHARED RAM
GRAPHICS: MOTOROLA 6845, EIGHT MODES FROM 640X256 (TWO COLOURS) TO 160X256 (EIGHT COLOURS)
AUDIO: TI SN76489, THREE SQUARE WAVE CHANNELS PLUS ONE NOISE CHANNEL
OPERATING SYSTEM: 6KB MACHINE OPERATING SYSTEM ROM
MEDIA: CASSETTE, OPTIONAL 5.25-INCH FLOPPY DISK INTERFACE, OPTIONAL HARD DISK INTERFACE

BBC Micro

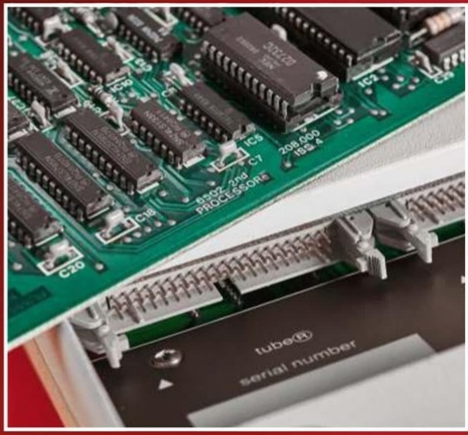
» **MANUFACTURER:** Acorn Computers » **YEAR:** 1981 » **COST:** £235 (Model A)/£335 (Model B) (launch), £75+ (today)

In one of life's cruel jokes, the most recognisable machine that Acorn Computers ever released didn't bear the Acorn name – instead carrying the branding of the British Broadcasting Corporation. The computer had been designed for the BBC Computer Literacy Project, and beat machines from five other companies to win the tender. The state broadcaster supported its chosen computer with the television show *The Computer Programme* and successor shows such as Micro Live. Additionally, educational materials were produced including a range of games that tied into TV serials such as *Through The Dragon's Eye*. As a result, the computer was a common sight in UK schools throughout the Eighties and Nineties. Though it wasn't as popular as the cheaper 8-bit micros for home users, it still hosted some excellent games over the years.

The BBC Micro was initially released in two models, the cheaper Model A and more capable Model B. Both were externally similar – the BBC was a big, bulky machine as wide and deep as a Commodore 64, but 14cm longer and twice as heavy. The machine was distinguished by its black keyboard and red row of function keys, as well as a cream case that has proven unfortunately prone to yellowing over the years.

EDITOR'S CHOICE
Elite

Certain games need no introduction, and we'd imagine that *Elite* is one of them. As well as being one of the rare games to have featured on the cover of **Retro Gamer** more than once, it was voted the best BBC Micro game by our readers in issue 148 and was ported to just about every system that had any hope of running it. But if you've only just joined us, *Elite* is an open-ended game in which you explore space, battle enemies including the Thargoids, and take on missions in order to upgrade your ship. You should probably stop reading this and play it.



Head Above Water: My first month at Ocean Software

On 19 January 1987, aged 16, I commenced work at Ocean Software as a graphic designer on, primarily, the ZX Spectrum. This is the story of my first few weeks as a professional game artist

Words by Mark R Jones

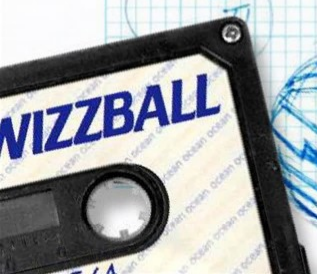
» Attempts at a *Wizball* logo drawn before the artwork for the game had been completed.

My first trip to Ocean's office in 6 Central Street was on 8 January 1987. After the train ride up from Northampton, for which I was accompanied by my mum, we walked the short distance in the melting snow from Piccadilly Station to Ocean's headquarters in Manchester's city centre. After being welcomed, we made our way downstairs to the office of the software development manager, Gary Bracey, situated in the cellar of the building. The interview was made up of an informal chat where Gary told me about how things worked at Ocean, the working hours and details of the wage I'd be earning. A tour of the building followed, where I was introduced to a few of the staff, some of them, like Jonathan 'Joffa' Smith and Paul Owens, I'd already heard of and read about them in magazines.

There then followed a look at some of the new titles being developed in-house, which included *Short Circuit* on the ZX Spectrum and *Arkanoid* on the Commodore 64. It was the first time I'd seen unfinished commercial games before, and I was very excited to be afforded the privilege. The place permeated with the aroma of coffee, cigarette smoke and the odd hygienically challenged staff member. Once back in his office Gary offered me the job. I was so excited. Ocean appeared to be a great place to work. It looked so interesting to actually be involved in making games just like the ones I'd been playing for the last three years at home. After a quick chat with my mum, I accepted his offer there and then and left feeling elated.

Upon my arrival on my first day there wasn't a programmer sitting there ready to be paired up with me. Until then I was to be given odd bits that needed doing. I was found a desk and some equipment to use and my first task, assigned to me by Gary Bracey, was to design a loading screen for an educational program on the Spectrum called *Say No To Strangers* for the Thetford Crime Prevention Panel. It was hardly a thrilling start.

My next job was to alter the title of a racing game on its already-finished loading screen. I had to remove the words '*Hyper Rally*'



ocean

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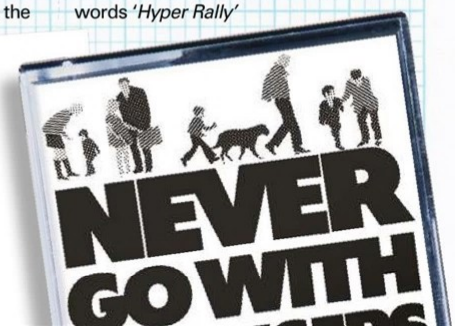
FAX NO. 061-834 0650

Our Ref: GB/js

Mark Jones Esq.,

» The letter informing Mark that Ocean Software was interested in offering him a job.



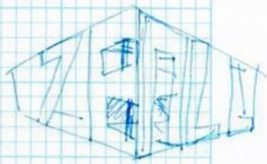
Ocean's headquarters in 6 Central Street, Manchester, circa mid 1987.

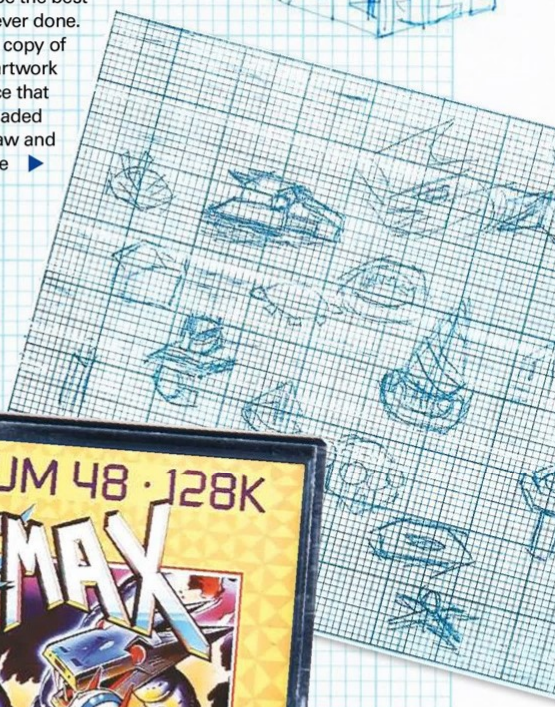
» When pre-production tapes of *Mag Max* turned up at Ocean to be tested, I grabbed myself one.

and replace them with the new title, '*Road Race*.' This game was a long-overdue conversion which, evidently, had been deemed too poor quality and too late to release as a standalone by Ocean bosses. Looking dated by 1987's standards, I didn't think it was much fun to play, either.

Upon seeing it running, I noted a distinct lack of speed, which obviously wasn't very good if you were supposed to be racing at many miles per hour. Ocean had obviously sorted out another way of raking back some of the money spent on its development by selling it to *Your Sinclair* which was planning on putting *Road Race* on a tape to be affixed to the front of one of its future issues. I carried out the changes and added 'An Easter Gift From Ocean' above the title. I also wrote 'Lettering By Mark R Jones' in some spare space on the bottom-left-hand corner then covered it in white paper and white ink so it was only visible when the colour attributes had been removed. That way, once it had been released, I could prove I'd had a hand in it to my friends.

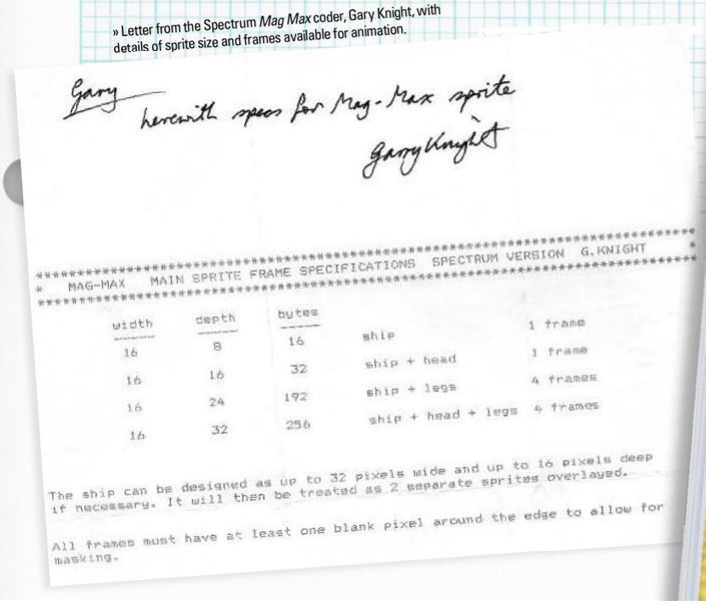
Once that was out of the way, Gary then asked me to produce a loading screen for *Mag Max* on the Spectrum. This title was a conversion of an arcade game by Nichibutsu and was to be released on its Imagine label. I hadn't seen *Mag Max*, either as an arcade game or on a Spectrum, so I had no idea what it was actually like. The only thing I was certain of was that this had to impress everyone; it, most definitely, had to be the best piece of work I'd ever done. Firstly I sourced a copy of the Bob Wakelin artwork for the game. Once that was procured, I loaded up Melbourne Draw and made a start. Time ▶





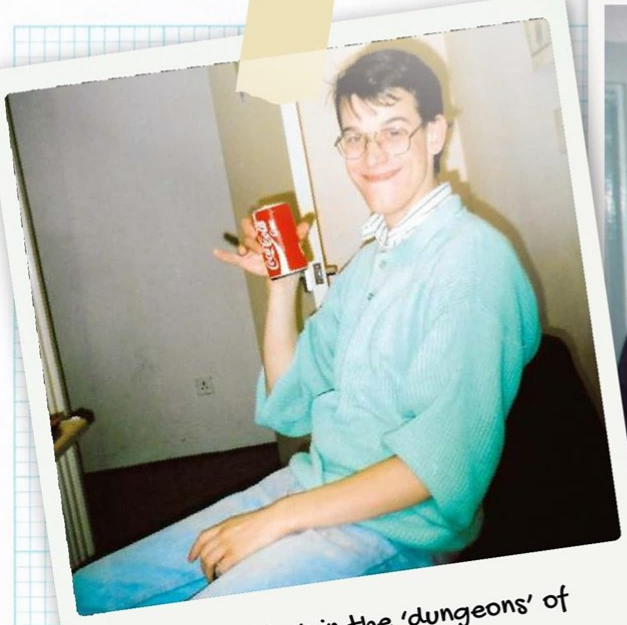
"The place permeated with the aroma of coffee, smoke and the odd hygienically challenged staff member"

» Letter from the Spectrum *Mag Max* coder, Gary Knight, with details of sprite size and frames available for animation.



Gary
herewith specs for Mag-Max sprite
Gary Knight

***



Me at my desk in the 'dungeons' of Ocean in mid 1987.

» Musician Jonathan Dunn and C64 artist Steve Wahid play on the *Operation Thunderbolt* arcade coin-op.

▶ would pass and I'd not even realise. Every couple of hours I'd get up and have a little wander about to see what everyone else was doing, then I'd go back to my screen and there I'd see something wrong glaring me in the face. If I was having an issue with an aspect of the illustration I'd walk away, come back with fresh eyes and I'd quickly find a solution. The screen took me around three days to complete. I was happy to realise it was the best piece of Spectrum work I'd done so far.

Afterwards, I started work on the Amstrad CPC loading screen for the same game. That caused me a few problems at first as I'd never used that machine before. Not only that, but I had to learn to use the Amstrad art package, something that normally takes a lot of practice. The Amstrad loading screen for *Mag Max* took me quite a bit longer than its Spectrum equivalent, but it turned out okay. It certainly wasn't anything to be embarrassed about considering it was my very first work on the machine.

Thinking I was then done with *Mag Max,* Gary then approached me to change some of the graphics in both versions of the game itself. The main character was a little ill-defined. I had a letter from the programmer, Gary Knight, that listed the character sizes required and started work on my very first animation. I'd not really made anything move before. I drew a robot head, a ship and animated a set of robot legs through three frames. The finished graphics did look a bit better than what had been there previously. Gary was right to have requested them to be redone. *Mag Max* wasn't going to cause any great shakes once released, but I was chuffed when the *Crash* review in issue 42 from July 1987 specifically mentioned: "...the brilliant loading screen raises expectations". That was enough for me. *Crash* was my favorite magazine and there, in it's pages, was my first piece of criticism, and it was positive.

One evening, while still staying at a hotel, I was messing about on Melbourne Houses' Wham The Music Box utility on my Spectrum and set about converting some music from the arcade version of *Arkanoid*. I'd heard all three in-game tunes playing almost every day at work as the Spectrum and Commodore 64 conversions were being worked on down the corridor

» Mark K Jones, Shaun Ridings, Steve Lavache and John Brandwood at work down in Ocean's programming department.

» Here I am posing with two of the sales staff, Jane Smithies and Clare Barnwell, on the Ocean stand at the PCW Show in London 1987.

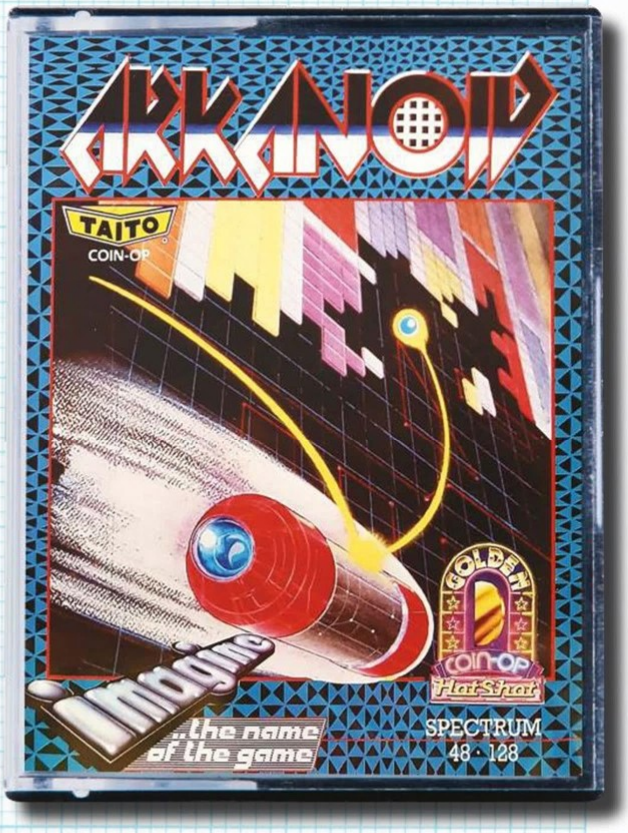
Me and my friend Mark Edwards looking dapper in our Ocean caps.

"Crash was my favorite magazine and there, in it's pages, was my first piece of criticism, and it was positive"

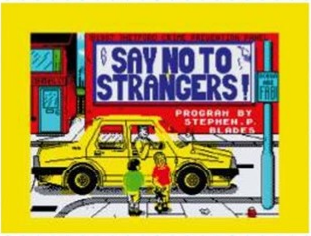
from me. I thought it might be nice to try and do a decent two-channel Spectrum version. It only took an hour or so and they were done. I went into work the next day and played them to Mike Lamb, the Spectrum coder for *Arkanoid*. He liked what he heard and straight away said he'd like to put them in the game. Ronnie Fowles, the artist, even gave me a credit on the loading screen.

I didn't have to wait long before my first proper project began. An original game was being developed out-of-house by Sensible Software on the Commodore 64. The year before it had written a game for Ocean called *Parallax* that had been well received, but as that had been the only version written I'd not played it. Gary had loved the early working version that had been sent to him of its new game and set about getting a Spectrum translation developed almost alongside the Commodore 64 version. This new game was called *Wizball*. I was teamed up with a chap called Steve Watson. He was a newly employed programmer and had previously written a game published by *The Edge* called *Psi* ▶

» [ZX Spectrum] My work composing music for *Arkanoid* only took me a couple of hours.



MY MINI ASSESSMENT Mark talks us through his work



SAY NO TO STRANGERS

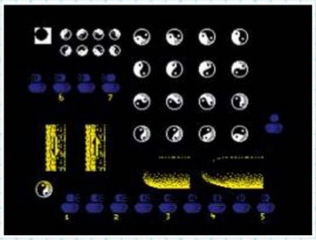
■ This Spectrum loading screen shows a would-be child abductor enitcing two youngsters into his car. Visible are a few Ocean references. It looks very amateurish, mainly due to the fact I didn't use any reference material and just drew it straight from my head onto the screen.

MAG MAX (ZX SPECTRUM)

■ Easily my best and most professional piece of work up to this point, and my first completed commercial game work. It's a shame the game itself wasn't much to shout out about. I enjoyed drawing this and was pleased it was given the thumbs up by other Ocean staff members.

MAG MAX (AMSTRAD CPC)

■ I started on this Amstrad loading screen immediately after its Spectrum equivalent was finished. Not only was I working on a machine I'd not used before, I had to learn how to use the graphic package as well. It didn't turn out too bad, all things considered.



UNUSED WIZBALL SPRITES

■ A lot of work went into the 16 frames of an unused 'Ying Yang' Wizball which was to be implemented in the game when you became invincible. In the end it wasn't used in either the C64 or Spectrum versions and neither was the eight-frame 'Ying Yang' cat animation.

» [ZX Spectrum] I still has all my original sprite files from my time at Ocean Software.

▶ *Chess* for the Spectrum. He did unnerve me a little with his wispy beard and long hair, which earned him his 'Catweazle' nickname.

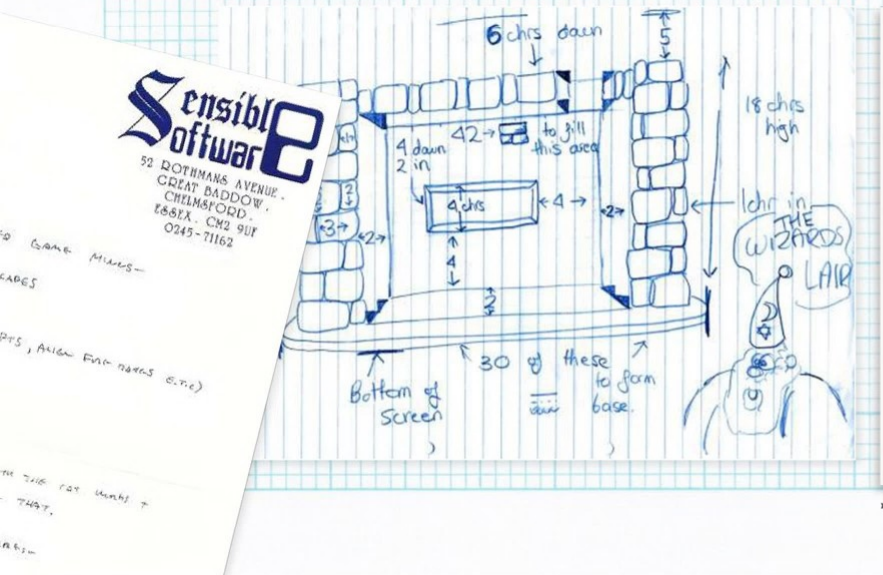
My first task on *Wizball* was to get the main character drawn and animating in rotation through 16 frames which, was an awful lot of frames for one character to use in a game for the ZX Spectrum. This was proving to be harder to pull off than I'd imagined. After hours of work, my first attempt had to be scrapped completely as I'd mistakenly drawn it as a line graphic using black ink on white paper and the inside of the Wizball was hollow. If that had been put into the game as it was, then the Wizball would look the same colour as as the background. I had to set my paper to black and draw in white ink on the computer screen in order for it to look as it should.

I'd done very little animation work up until then, there was none featured in the demo tape I'd sent to Ocean to get the job, and I remember getting quite a bit of help from another artist called Simon Butler who had started as a full-time in-house Ocean employee about three weeks after me. Simon had been doing this kind of work for a few years already, having worked at various software companies. Simon was always willing to help anyone out at Ocean should they need his expertise and experience. I started again on the main Wizball graphic and this second attempt was perfected and used, after about a week of changing a pixel here and a pixel there, in the finished game. I hadn't ever drawn a 16x16 pixel graphic before, let alone animated one through 16 frames!

Not long after the release of *Arkanoid,* Gary stopped me as I was passing by his office. "Mark, what did you use to make the music for *Arkanoid* on the Spectrum?" he said. "Wham The Music Box, why?" I replied. Gary's face dropped, "Oh really?" he said, "Why didn't you pass it by me first? We've now got to pay some money to Melbourne House!" Apparently, if you wanted to use anything made with its software in a commercially released title, you had to pay Melbourne House for the rights.

Every couple of weeks a new version of *Wizball* would arrive on a Commodore 64 floppy disk and I would sit there with a pencil and piece of paper and draw the new graphics

> "After hours of work, my first attempt had to be scrapped completely"

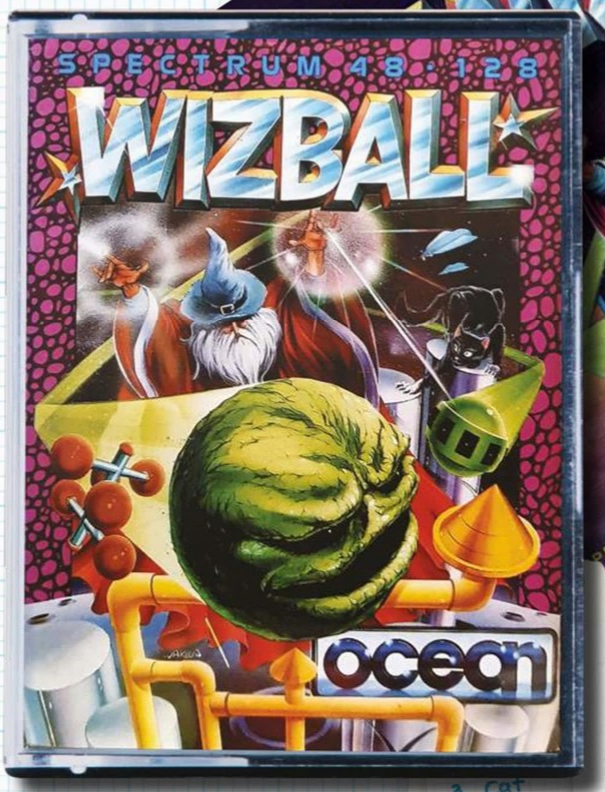


» The redone wizard and cat graphic in the Wizard's Lair.

WIZBALL (ZX SPECTRUM)

■ Simon Butler helped me with the initial layout when we worked out how to translate Bob Wakelin's artwork to fit the Spectrum's display. It pops up when retro gamers are asked what their favourite Spectrum loading screen is, which I'm terribly chuffed about.

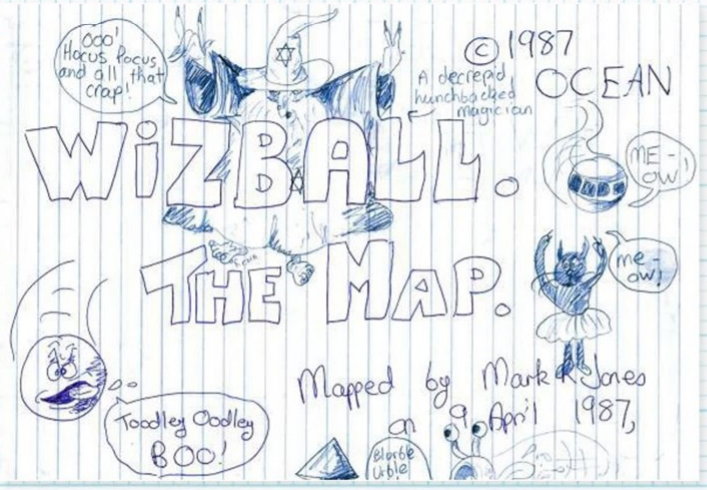
from the screen in order to translate them onto the Spectrum. The only headache I was currently having was trying to get the impressive Mount Rushmore graphic translated across. The C64 version looked amazing so my Spectrum equivalent had to be spot on as well. After a few hours of tinkering about my version was looking rather pathetic. Having spent a whole morning trying to do it by hand I had a brain wave and found a solution that involved a bit of cheating. I affixed a piece of acetate to the Commodore 64 screen, played the latest *Wizball* demo and paused it when Mount Rushmore appeared. I then traced the graphic onto the acetate with a pen then stuck the acetate onto my Spectrum monitor and drew round the traced image onto the blank screen. Once I had drawn the main shape on the Spectrum I then filled in the detail using the traditional method. It was crude, but it worked.



» I translated Bob Wakelin's amazing *Wizball* art to the ZX Spectrum's display, and feel I did a great job.

Steve left while *Wizball* was still incomplete. One day he just didn't turn up for work and was never seen by anyone at Ocean again. The game was finished off by Paul Owens, another Z80 programmer, and released late. It had plenty of features that hadn't been implemented and went out to the shops, in my opinion, unfinished. I wasn't happy... but it was my first, and definitely not my last, lesson in the unpredicable nature of the industry, but that's a story for another time. ✱

All art and images belong to Mark R Jones, look out for his first book about Ocean Software later this year.



Robotron: 2084

» **DEVELOPER:** Vid Kidz » **YEAR:** 1982

Eugene Jarvis certainly didn't like to be conventional when it came to control setups for his numerous arcade games. In our last issue we looked at the challenging layout of *Defender*, with its distinctive five-button layout, and this time we're going in the complete opposite direction by focusing on a game of Eugene's that has no fire buttons at all.

Whilst *Robotron*'s setup is certainly unusual for the time, it certainly wasn't original as Taito's *Gun Fight* beat it to the punch by a good six years. Having said that, *Robotron*'s identical-looking sticks are a lot more pleasing to the eye than the configuration used by Taito, and they feel a lot nicer, too. And it's important that *Robotron*'s joysticks are comfortable to the touch, as you'll be using them a lot. *Robotron* is an extremely physical game; those sticks need to put up with a lot of abuse as you're constantly being assaulted by enemies from all sides, and those two controllers are your only way out. You know when you've had a game of *Robotron* because it was one of the few arcade games of the time that challenged your brain as well as your stamina.

Robotron: 2084 fact

■ The two-stick layout for *Robotron* came about because Eugene's arm was in plaster after an automobile accident and he wanted to improve upon *Berzerk*'s control scheme.

STANDOUT MOMENT
Beware the brains

There are plenty of interesting enemy designs in *Robotron* but our favourites are easily the Brains. These nefarious enemies start to appear from level five onwards and they prove to be one of *Robotron*'s most daunting and memorable foes. Not only do they fire out annoying lasers that can instantly kill you on contact, they also use those same lasers of death to transform any female humans that are in the vicinity. As a result, the stage turns into a frantic race where you're trying to gun down as many Brains as possible, while desperately reaching any available women before they get turned and become yet another threat to deal with. Stressful doesn't even begin to cover it.

SYSTEM SUPPLIED BY **ARCADE CLUB**

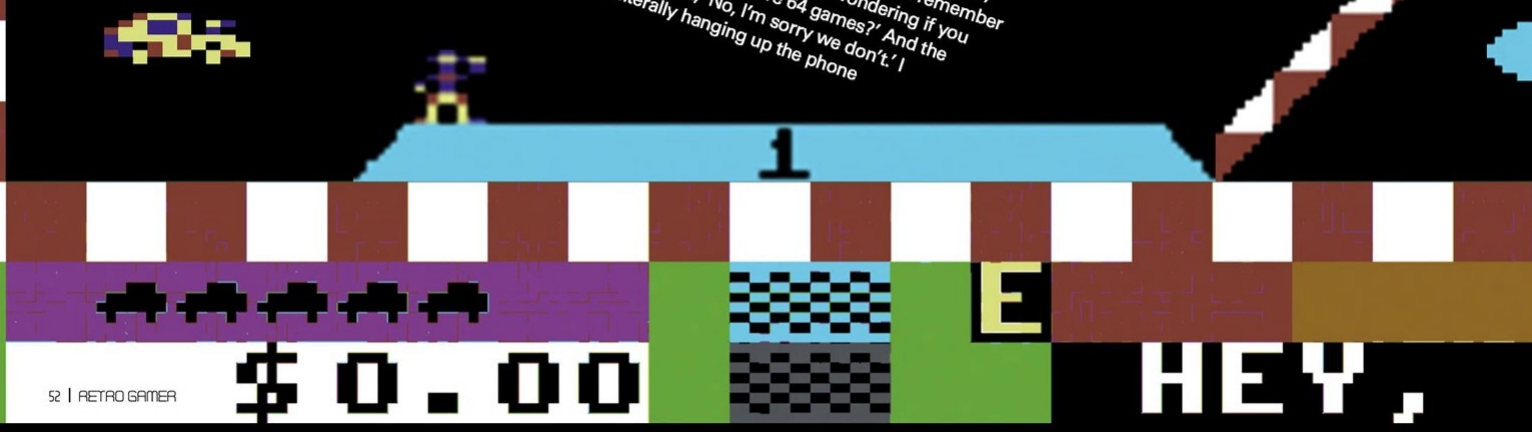
The Making Of space TAXI

The Commodore 64 classic Space Taxi was ahead of its time, featuring a sophisticated physics engine, speech and creative level designs, and is now highly sought after. John F Kutcher explains how he created it while studying

Words by Andrew Fisher

My mom saw an article in our local newspaper about two kids that had built this game," John begins. "I went over and talked with them. That inspired me, that's something I could do. So I bought a C64 (with a loan from my grandfather) and that summer I programmed my first game, *Rescue Squad*." John was 17 years old and a senior in high school. The school's computer was where his programming career had started, followed by teaching himself machine code on the TRS-80.

John needed a publisher for his game. "The day I finished the game – at least I thought I was finished – I literally opened up the phone book. When I look back I realise how ridiculously crazy it was that this actually worked. I was just lucky there happened to be a publisher in Baltimore, MUSE Software. I called up, and I can remember to this day, saying, 'Hi, I was wondering if you published Commodore 64 games?' And the operator said, 'No, I'm sorry we don't.' I was literally hanging up the phone



» [C64] Level 7, Puzzler: "Each switch does different doors, so you get all different combinations," says John.

IN THE KNOW

- » **DEVELOPER:** Muse Software
- » **PUBLISHER:** In-house
- » **RELEASED:** 1984
- » **PLATFORM:** COMMODORE 64
- » **GENRE:** Adventure

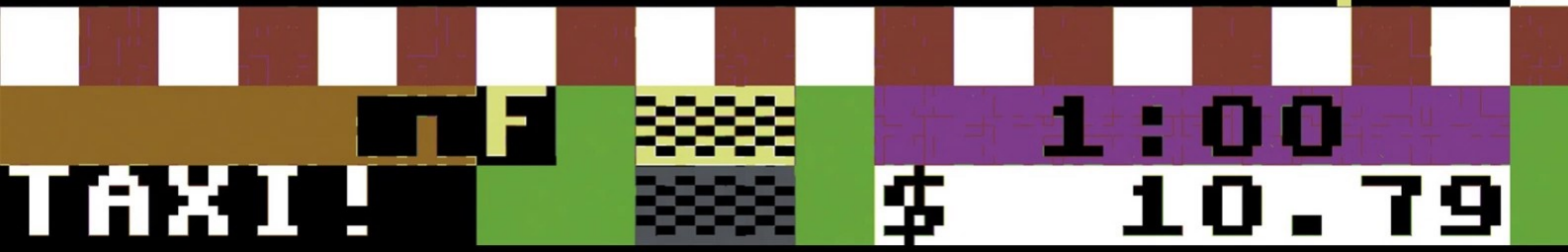
after I said, 'I had one I wanted to get published.' I heard, 'Wait, wait!' I pulled the phone back to my ear and she said, 'We don't have any, but we'd love to have some.' I went in as a 17-year old kid to the office, showed the game and drove home to my grandmother's. By the time I got back, they had called and said, 'Can you come back in, we have a contract for you.' MUSE added music by Silas Warner and published *Rescue Squad*.

In autumn 1983, John started studying at the Johns Hopkins University in Baltimore, and began work on *Space Taxi*. What inspired him? "I didn't really play a ton of games," admits John. "Definitely *Lunar Lander* and *Asteroids*. Just writing the whole physics engine, once I had the engine that simulated gravity and thrusts it was really just creativity at that point. Most of the levels were different inspirations and ideas that came to me. I got to the point where I was writing a level a day. I worked pretty intensely on it during winter break, so in six weeks I wrote the bulk of it and then refined it throughout the spring of 1984.

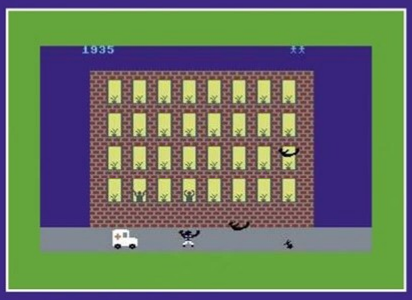
"I built the sprite editor and the character editor, fairly simple, it let you click the pixels on and off to build something", John continues. "I took the character set and redefined maybe like 32 of them to be little blocks or angles so I could build different shapes." The ideas for the levels flowed from one another as John started building them. "The parameters for each level were all done in code. I created what I called a module file. There were certain memory positions that were the thrust, the gravity coefficient (horizontal or vertical), and then any code that happened in the game loop. So, in the Shooting Stars level, the loop would randomly decide where a new star was going to start, and each time it looped around it would move the star a little bit. Each module had some of the parameters of the level but also a bit of the code needed for that level." Several levels used animated characters, from the growing beanstalk to moving platforms and energy barriers. "Part of the challenge and fun of writing the game was using the essentially limited capabilities of the machine," John points out.

The C64's sprites were vital to *Space Taxi*. "You could create an object and move it around, and detect collisions. There was hardware support for that, and that was kinda innovative at that moment in time. Obviously the taxi was always a sprite. Some of the animation I tried to do in characters so I didn't mess up my sprites. Anything where I had to detect, the sprites could detect colour collisions with the background. With the stars falling, or the snowflakes falling, you will notice when one of them leaves the screen then another one starts." It is also a very colourful game. "I'm not an artist," John says. "I did everything myself. I made all the sprites, all the characters, so I think what I lacked in drawing ability I made up in colour and creativity."

One creative aspect was the speech, with passengers saying, 'Hey, taxi!' and asking for a destination. John created it all himself. "I went to Radio Shack, bought some components and built a little prototype circuit board, soldering ▶



MORE FROM MUSE More games from Ed Zaron's Micro Users Software Exchange



RESCUE SQUAD

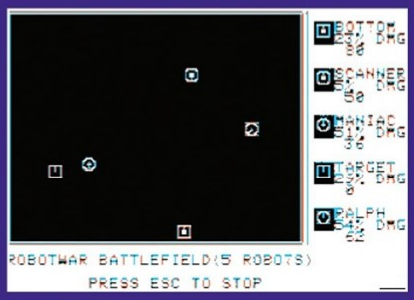
C64, 1983

■ John Kutcher's first game played out over three different screens and is still pretty enjoyable. Race to the fire dodging traffic *Frogger*-style, catch the people jumping out of windows and then go inside to rescue more people in a *Pac-Man* maze (with asbestos suits acting as the invincibility pill).

TITAN EMPIRE

APPLE II, 1983

■ This early real-time strategy game has the Titan Empire trying to take over the Solar System, but the player's starship must stop them. By conquering enemy-held worlds, transporting armies and defending friendly planets, the Empire can be defeated.



ROBOT WAR

APPLE II, 1981

■ The player used a built-in language to 'program' a robot, which was then sent into an arena to fight up to four other robots automatically (no player input). Robots were saved to disk and shared, with *Computer Gaming World* magazine hosting an annual contest to find the best robot.

» John F Kutcher worked on the likes of *Space Taxi*, *Rescue Squad* and *Solo Flight: Second Edition*.

▶ everything together. I took a microphone and ran wires through transistors into an analogue-to-digital converter, hooked to the C64 expansion port. I wrote software that would pulse the converter, sampling the voltage level as an 8-bit value. I would read that back through the port, store it in memory and repeat the cycle. Basically, converting the signal to a volume from 0 to 255.

"I took the sound chip and played it back – all I did was change the volume of the speaker, I set a tone like a C-note, whatever that frequency was. I changed the volume based on what I had sampled. It talked, holy crap it actually worked!" And the different voices? "I just changed the speed I played it back at or the base pitch for the tone, and it made it sound like different people. It was pretty innovative back then, one of the first talking games," John proudly recalls.

» [C64] Level 21, Rebound: "I got the idea when you got hit by something it didn't have to kill you but it could move you around," says John.

Silas Warner, another MUSE coder, had done something similar with *Castle Wolfenstein* on the Apple II; he composed the music for *Space Taxi*. What are John's memories of working alongside Silas, who passed away in 2004? "He was larger than life both in size and character, an Andre The Giant type of figure. [...] He gave me the routines to play the music file. I was always very impressed with that. The C64 not only had the sprite innovations, it had the sound chip, and he was really able to make that come to life."

The game allows for up to four (alternating) players and is split into three eight-hour shifts, a full 24-hour shift and a 24-hour shift that plays the levels in a random order. "I wanted to get to the 24 hours for three shifts, so I wanted to make 24 levels and then be done," says John. The coder's programming style meant there was little testing needed. "I would write something for an hour and immediately test it. By the time I got through a day it was done. There wasn't much left to check."

Promoting the game lead to good reviews and selection for the Winter CES Software Showcase (highlighting ten top titles) in January 1985. "MUSE had a really effective public relations guy at the time, Jack Kammer. He did a great job getting the game into magazines. I would go into a bookstore, for a couple of months, and it was in like 20 magazines." *Space Taxi* would go on to sell approximately 10,000 copies, enough to pay for a year of John's college tuition. "It was limited by some of the success of MUSE; once MUSE came out with their next title, they kind of put all their

THREE MILE ISLAND

APPLE II, 1979

■ Following the Three Mile Island disaster, this simulation put the player in charge of a nuclear power plant. You have to meet the demand for electricity, deal with government officials and prevent a meltdown. Written in Integer Basic, the machine code Special Edition (shown here) was released later.

ESCAPE!

APPLE II, 1978

■ This early first-person game by Silas Warner featured a randomly-generated maze. Characters met can help or hinder, giving extra items or lying to the player. The related *Maze Game* by Silas released the same year featured options to change maze size and leave footprints to aid navigation.

> "I would write something for an hour and immediately test it. By the time I got through a day it was done"
>
> John F Kutcher

energy into the next title. I respect all the people at MUSE, they gave me a chance – [but] I think with a different publisher it probably would have sold significantly more." John was working for a decent hourly rate and royalties, which he estimates was around 10 per cent of what MUSE got.

When MUSE went bankrupt, John retained the rights to *Space Taxi*. "It was always my IP, MUSE just had a publishing relationship. So when they went bankrupt, that ended. Someone bought a lot of their rights and I let them distribute it for a couple of years." That was Main Street Publishing, a US budget label. John remembers taking a college roommate to the bankruptcy auction. "It was comical that people were bidding on a used C64 for more money than you could go down and buy it at the store." After consulting for Microprose, John moved into programming medical software designed for trauma units.

In 2005 Twilight Games approached John for permission to make *Space Taxi 2*. "About once a year someone would contact me and write a nice note about how they liked the game, and several people have expressed interest in doing various remakes. Twilight Games put a lot of energy into their version, I thought they did a great job modernising the game. We talked through some of the levels, and I shared with them the parameter files for each level so they could simulate the thrust and the gravity from data."

Would John like to see a new *Space Taxi*? "I'm always up for helping license the concept. I always thought it would be cool to have a version from inside the cab – Microprose's founder Bill Stealey said, 'Hey what's your next idea?' And I said I liked the idea of doing *Space Taxi* from inside. But I just didn't have time, with college, and I got into this medical software field and have been doing that for the last 35 years.

"I got the emulator and tried to show my kids a couple of years ago, and it's humbling when you realise they are so used to modern games – it didn't even remotely catch their interest!" John laughs. "It's very nice that people liked it and take the time to talk about it. Apparently *Space Taxi* was super popular in Germany, for some reason, so I joke around with people that I'm like David Hasselhoff, I'm more famous in Germany." ✱

Thanks to Joerg Droege (sceneworld.org) for his help

GOING SOLO

John F Kutcher on helping create Solo Flight: Second Edition

"[Former MUSE vice-president] Don Awalt formed a consulting company called RDA Consulting, which went on to be very popular. I worked with them during grad school for Microprose, with Sid Meier, building the Commodore 64 engine for *Solo Flight 2nd Edition*," explains John, referring to the third version of the game to be released on that machine. "Sid had a language he called SIDTRAN, basically like a byte-code language. I wrote both the interpreter and the visual renderer that went along with that. I helped bring that game to life on the C64."

Players learnt to fly on maps based on real-life data, and could then fly mail deliveries between American cities. John's work involved adding terrain features. "Some of it was literally as simple as changing the colour," John remembers. "When you are flying over water, making it blue instead of green. It was getting that from map data... the land below showed up as different colours or different shapes. I don't know if the concept of different altitudes was something I introduced, or something that had already been there, that I can't recall." *Solo Flight* got mixed reviews but remains an interesting take on the flight simulator genre.

CLASSIC MOMENTS

Panic!

» **PLATFORM:** MEGA-CD » **RELEASED:** SEGA/OFFICE I » **DEVELOPER:** 1993

You never were the sort of person that could wait for new technology, but this time you feel like you might have made a bit of a mistake by jumping in early. Your imported Mega-CD cost a fortune, and the games haven't been remarkable so far. Desperate for things to play, you turn to the *Mean Machines Sega* book you picked up a little while ago, and happen upon this. You can't work out what's going on, but it scored well and it looks a bit like *Monty Python*, so you take the plunge.

After an intro you totally don't get, the boy is confronted by an ordinary living room and a bank of buttons. You hit one. The vacuum cleaner suddenly sprouts teeth and begins eating the scenery, before chasing your little guy off the screen! Is the game over already? Thankfully not – now you're back to the screen with all the buttons, and you can't wait to see what the rest of them do. ✱

BIO

This bizarre game casts you as the young boy Slap (owner of a dog named Stick, naturally), who has been tasked with fixing the world's central computer after every bit of technology goes haywire at once. In order to do this, you must push a series of buttons to navigate a complex maze – most will just make odd things happen, some will transport Slap around the maze, and others blow up monuments. Sega published the game in Japan under the name Switch, but left the US release to Data East. Surprisingly, a Japan-only PlayStation 2 conversion was released in 2002.

MORE CLASSIC PANIC! MOMENTS

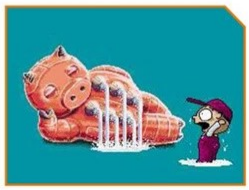
Mona Lycanthrope

This one caught us by surprise when we first saw it. The sky in the background of the famous painting darkens, and the clouds part to reveal a full moon. Suddenly the Mona Lisa transforms into a werewolf and lets out a monstrous howl, scaring the hell out of the little guy you control.

Tongue Lashing

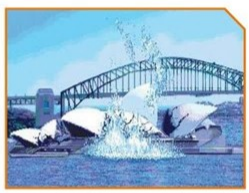
When confronted with a toilet floating in space, what do you expect to see – more of the game's scatological humour, perhaps? Nope. Instead, pushing the button leads to the emergence of an enormous tongue, which wraps itself around our hero and drags him into the bowl. Lovely.

Chips And Teats



Let's be honest – when you first see this robotic pig, you can't help but notice its big, metal nipples. So when you hit a button and get your little guy sprayed with milk, you're not entirely surprised by this outcome. However, the little satisfied smirk he gives you after the initial shock? That one's just *weird.*

Sorry, Aussies



Why are there booby-trapped buttons in *Panic!* in the first place? We have no idea, but they blow up famous landmarks around the world, completely at random. We've accidentally caused the Sydney Opera House to collapse into the sea here. Whoops – even Bradman made a duck…

ULTIMATE GUIDE:

ROAD RUNNER

Atari's Road Runner arcade game is far from the finest cartoon licence. It's not even the best game based on the Road Runner cartoon. But like many coin-ops of the era, it possesses a special, evocative gravitas that's difficult to resist

Words by Martyn Carroll

» [Arcade] Dodging pogo stick Wile E is one of the harder challenges, especially on later loops.

It's not hard to see why the *Road Runner* and Wile E Coyote cartoons are so popular with kids. The simple chase premise, the outlandish Acme contraptions Wile E uses to try and capture his feathered prey, the way said contraptions backfire spectacularly and leave him flattened, on fire, at the foot of a deep ravine, or typically all three. It's a classic from the golden age of animation that never gets old.

Someone who loved the cartoon as a kid was Atari's Ed Logg, codeveloper of *Asteroids* and *Centipede*. As Atari was owned by Warner Bros, the coin-op division was actively encouraged to consider Warner properties for its arcade games. From the vast wealth of Warner's assets Ed chose *Road Runner*, mainly because he was a fan but also because he believed that the chase-and-evade theme would make for a good game. And so a side-scrolling design was conceived where the player, as *Road Runner*, raced through the wilds while being doggedly pursued by the Coyote. There were hazards to avoid, such as traffic, falling boulders and broken bridges, but Wile E was always the main threat and as per the cartoon he'd give chase using a variety of wacky devices including rocket-powered rollerskates, a jet-propelled pogo stick and a backpack helicopter – all 'satisfaction guaranteed' by Acme, of course. It was a simple concept, but the initial implementation was anything but.

At the time Atari was heavily invested in LaserDisc games and *Road Runner* was chosen as one of several titles to utilise the new technology. The various sprites would be overlaid onto the scrolling desert background that streamed from disc and when the perusing Coyote became a cropper, the gameplay would be interrupted to show actual cartoon footage of his demise. A working prototype was created for a test location and it received lukewarm reactions, largely down to issues with the LaserDisc technology. Sometimes the sprites and disc footage didn't marry up quite right and the gameplay was often disrupted due to delays in accessing the disc. Compounding matters were the high failure rates of Firefox, the one Atari laserdisc game that did make it out of prototype. The LaserDisc program was soon scrapped, but ▶

> **"I thought the arcade game was great. It played well and had lots of 'fun' elements"**
> Sean Townsend

CONVERTING ROAD RUNNER

Sean Townsend coded the Commodore 64 version of the game.

How did you wind up working at Canvas on the *Road Runner* Commodore 64 conversion?
I was working for Binary Designs in Manchester and got along well with Steve Ward there. We'd often go to the arcade at lunchtime to play *Gauntlet*. Steve left to work for Canvas and I followed him a short time later. My first job for Canvas was the C64 version of *Road Runner*. Canvas was based in Crosby and I worked from home in Rochdale. I had to turn up at work once a month or so to show my progress.

What did you think of the *Road Runner* coin-op, and did you have access to it while you were doing the conversion?
I thought the original arcade game was great. It played well and had lots of 'fun' elements taken straight out of the cartoon. I did have access to the coin-op for a short period of time in the Canvas office. Plenty of video recordings were taken so I could use them as reference back home.

Can you recall Atari or Warner approving your work?
I'm not sure about this. Maybe the directors had to show the demos I had done? If they did have any issues they never made it back to me. I can only assume they were happy with the demos and the final product.

» [C64] All of the gameplay elements from the arcade original are featured.

The only real criticism levelled at the C64 version was the multiload on cassette. Can you recall any efforts to try and mitigate this?
The cassette version didn't get much love from me, to be honest. All I was interested in was getting it finished on time. There were a hell of a lot of graphics and level data to load and it worked quite well loading from disk. The cassette version was always going to be a pain, having to rewind the tape every time you died. I did find out much later that someone (or a group) had managed to compress the levels and load them all in at once. I have no idea how they did this as I know just how short of memory I was at the time. I was even switching out the kernel as there was no way I had enough RAM without that extra 8K.

Overall were you happy with how the C64 version turned out?
Yes, I was happy. There were a few issues that I would have liked to have ironed out, but I just didn't have the time. Even now, the games I develop can be thrown together quickly but to fix all the issues and add some fairy dust takes much longer.

» [C64] The graphics were drawn by Martin Calvert while Fred Gray contributed the soundtrack.

CONVERSION CAPERS

How did the home versions measure up?

COMMODORE 64

■ This is an all-round excellent conversion that looks great, sounds fantastic, moves at a decent clip and features all of the gameplay elements from the coin-op. The cassette loader is a well-known pain, but on disk (or indeed under emulation) it's a real charm.

ZX SPECTRUM

■ Probably the weakest version. The Speccy's colour doesn't lend itself to the game and the action takes place in a small window, presumably to necessitate scrolling. This cramped field makes the game extra difficult. Just about okay as a compilation filler.

AMSTRAD CPC

■ A clear cut above the Spectrum version, although it too runs in an unwelcome window (nice border mind). Full-colour sprites and smooth scrolling are definite positives. On the downside the game runs at a sedate pace, and there's a lack of in-game music.

ATARI ST

■ This version benefits from 16-bit performance and is unsurprisingly close to the coin-op, even if the sound lacks punch and the colours are a little off. The parallax scrolling effect has been well implemented and overall this is the most faithful version outside of the arcade.

PC/DOS

■ The PC version, developed for the US market by Mindscape, looks very similar to the ST version (in EGA mode at least). Obviously the sound is inferior, and it's preferable to play in silence. It does include an option for mouse control which works surprisingly well.

NES

■ Arcade ports for the NES often play loose with the source material – not here, though. This is a very faithful version that stays true to the coin-op original in pretty much every way – although Wile E Coyote does like some guy dressed in a wolf costume.

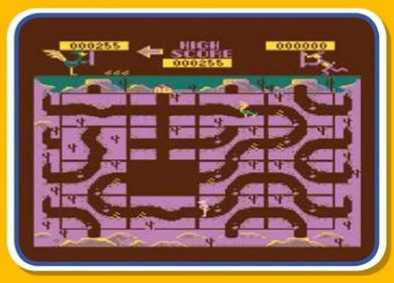
» [Arcade] Wile E's devious trackside cannons claim another life.

» [Arcade] The shortcut is a novel continue feature, allowing you to travel to the last stage you reached.

» [Arcade] Riding his volatile Acme rocket, Wile E tries in vain to swipe Road Runner.

ROAD RUNNER 5200

Before the coin-op there was... something different.



The Atari coin-op was not the first game to use the *Road Runner* licence. In 1983 a title was put into development for the Atari 5200 console that married the *Road Runner* chase scenario with a slide block puzzle game, and the result was not unlike the Konami coin-op *Loco-Motion*. Here players were on the side of Wile E and they had to manipulate the game board pieces to ensure he chomped more birdseed than Road Runner. It made zero sense and was such a peculiar use of the licence that the game was unsurprisingly smothered before it had chance to snatch a breath. Years later the unfinished prototype was discovered and shared, so you can now at least play the game – and quickly realise that there was far more appropriate uses of the licence.

the amount of time and money already spent on *Road Runner* meant that the game itself was saved. Ed Logg left the project at this point and he was replaced by Mike Hally of *Gravitar* and *Star Wars* fame.

Mike's job was not to redesign the game but to convert it to run on Atari's System 1 hardware – a new spec that allowed games to be easily interchanged. The sprites already existed, so it was primarily a case of recreating the cartoon backgrounds from the LaserDisc using the System 1's 256-colour display – a job which Atari artists Sam Comstock and Mark West handled with aplomb. An impressive parallax-scrolling effect was added to complete the cartoon look. The original LaserDisc audio was replaced by chip music, and the cartoon attract mode and intermissions had to be chopped, but overall the System 1 version of *Road Runner* was admirable close to the LaserDisc prototype.

> **"Plenty of video recordings were taken so I could use them as reference back home"**
> Sean Townsend

There was a key difference to the gameplay, however. In the prototype the birdseed that littered the route was only there to boost your score, but in the released version *Road Runner* would 'faint' and lose a life if a total of five birdseeds were missed. This made the game much harder overall, and was no doubt a business decision designed to keep the quarters flowing. It was a fairly short game, featuring four stages that looped indefinitely (with the difficulty increasing with each loop), so the birdseed challenge ensured that players could not exhaust the game with little effort – or expense.

Road Runner belatedly arrived in arcades in 1986, around two years after the project was started. It was available as a dedicated upright cab or as a conversion kit for Atari's existing System 1 games such as *Marble Madness*, *Peter Pack Rat* and *Indiana Jones And The Temple Of Doom*. The marquee and control panel featured memorable artwork from the cartoon, and the catchy (and loud) rendition of the Sabre Dance movement that played over the attract mode certainly drew attention to the machine.

Brit publisher US Gold saw the appeal of the game and grabbed the home licence in 1987. "It was an obvious choice because everyone knows *Road Runner* and it'll sell," US Gold's Tim Chaney told the games press at the time. "It's also an easy conversion. There's no point in licensing something that's unconvertible." He went on to make reference to *Gauntlet*, another

ESSENTIAL TOONS

Classics featuring the Looney Tunes mob

THE BUGS BUNNY CRAZY CASTLE

Format: Game Boy
Year: 1990

■ The first in the series of puzzlers is a gem. Bugs can't jump, so you have to use your brain to thwart the villains.

DEATH VALLEY RALLY

Format: SNES
Year: 1992

■ At first glance it looks like a *Sonic* rip-off, but there's lots of devious platforming and clever touches here – especially the end-stage bosses.

TAZ-MANIA

Format: Master System
Year: 1992

■ Not the more familiar Mega Drive title. This version is better balanced while still providing a decent, albeit short-lived challenge.

LOONEY TUNES BASKETBALL

Format: SNES
Year: 1995

■ This is a fantastic SNES basketball game that's a lot of fun to play. Even if you're not a fan of the sport, the madcap characters really sell this.

BUGS BUNNY: LOST IN TIME

Format: PlayStation
Year: 1999

■ This PlayStation platformer is worth checking out for the art style and soundtrack alone.

» [Arcade] Almost there. The final section involves a series of perilous jumps across a gorge.

» [Arcade] The game is sure to strike a chord with anyone who enjoys the classic *Road Runner* cartoon.

> **“It was available as an upright cab or as a conversion kit for Atari’s existing System 1 games”**

Atari game which ran on similar hardware as *Road Runner* and had been a massive home hit for US Gold. The firm commissioned Liverpool-based Canvas Software (which had handled the *Leaderboard* and *Super Cycle* conversions) to develop the game for the Commodore 64, Spectrum, Amstrad CPC and Atari ST. The C64 version was the highlight, with *C&VG* magazine scoring it 10/10 and awarding it the ‘Game of the Month’ accolade, calling it “almost an exact copy” of the coin-op. All of the versions were pretty faithful – and there was good reason for this. “The licensing side of the *Road Runner* deal is complex,” revealed Chaney in 1987. “Each version must be sent to both Atari Games and Warner Bros once a month. If they take exception to anything it could well mean going right back and starting from scratch.”

Mindscape later released a version for the PC that was evidently based on the ST version. Console versions followed in 1989, first for the NES and then the antiquated Atari 2600. This was one of the final 2600 titles to be released, and while it was only loosely based on the original, it did remove that damned ‘seed meter’ and was all the better for it.

Due to the Warner Bros licence, *Road Runner* hasn’t been included on any of the Atari retro compilations that have been released over the years. If you want to revisit the game then MAME is probably your best option, although the controls can be an issue. This is because the original coin-op uses a ‘Hall effect’ joystick that gives you precise, analogue control (the more you push, the faster *Road Runner* moves). Under emulation using a mouse is preferable to using keys, but if you’re able to configure an analogue joystick then it’s worth the effort to enjoy the game as it was original intended – LaserDisc notwithstanding. *

RULES OF THE ROAD

Top tips to prolong your life and boost your score

ACCELERATTI INCREDIBILIS

■ Don’t race too far in front of Wile E. If he disappears off the screen to the right, he’ll strap on his rocket-powered rollerskates and come racing after you. Slow down regularly to ensure he’s always visible on the screen.

POINTUS SCORUS

■ At its heart, *Road Runner* is all about hauling as many points as you can. The value of birdseed increases if you collect them in sequence, and you can earn bonus points by drinking cool lemonade (if you have time) and giving Wile E the ‘tongue’.

HELIUS VULGARIS

■ At stage four Wile E will turn up the heat by taking to the air in an Acme-produced backpack helicopter, and to confound things more he’ll start lobbing sticks of dynamite at you. To avoid being blown up, run at full speed while moving diagonally up and down.

BOMBUS ASPHALTUS

■ Mines are introduced on the second loop (stages five through eight). Stepping on these is an instant kaboom, so you’ll need to use the ‘hop’ button frequently. Of course you can turn the tables by luring Coyote onto them.

EATIUS BIRDIUS

■ On the third loop (stages nine through 12) you’ll begin to see piles of birdseed laced with steel shot that you must avoid. If you accidentally gobble them, Wile E will pursue you with his magnet that pulls you towards him and is difficult to escape.

DISAPPEARIALIS QUICKIUS

■ The final new feature introduced on loop four (stages 13 to 16) is magic paint. If Wile E finds a can it makes him invisible and harder to evade. The trick is to grab the can first, as this makes you invisible and confuses the hell out of him.

MyThos

We've captured cofounder Julian Gollop for interrogation; time to reverse engineer the story of Mythos Games, the strategy giant that gave birth to the legendary X-COM

Words by Paul Walker-Emig

Julian Gollop has always been interested in a certain kind of game. Over the course of his career, he's continued to riff-on, experiment and evolve a series of key concepts, refining his ideas around turn-based battles, squad systems, and role-playing with each release, giving birth to the legendary *X-COM* series along the way.

"It comes from my interest in wargaming and board games," Julian explains. "I was pretty heavily into the board games that were published by SPI and Avalon Hill. By and large, these games didn't exist on the computer. That's what I wanted to do. To recreate some of the things I was experiencing in the board games and make use of what the computer can do. A computer can check lines of sight, it can do all the calculations for you, which I thought was awesome."

This manifested in the early games that Julian worked on while at secondary school and college at the London School of Economics, such as *Chaos: The Battle Of Wizards* and *Rebelstar*, released in 1985 and 1986 respectively, where board game influences are evident in the use of action points, morale and encumbrance systems. Given that Julian had put most of his energy into developing these games rather than studying at LSE, he decided to drop out and form his own company, Target Games.

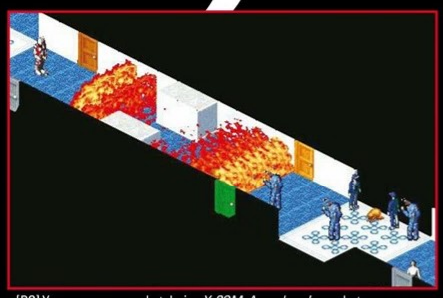
"We set up in 1987 with a friend of mine called Ian Terry, and my Dad," Julian tells us. "Ian left the company after a year, my brother [Nick Gollop] joined me and then we decided to set up a new company, Mythos Games, which was now me, my brother and my Dad." During Target Games brief history, the company finished development on *Rebelstar II* and began work on what would become Mythos Game's first release: *Laser Squad*.

"*Laser Squad* was a follow up, really an evolution, along a similar path from *Rebelstar Raiders* to *Rebelstar* and *Rebelstar II*," Julian explains. Indeed, *Laser Squad* was, like *Rebelstar II* before it, another game where you controlled a squad, had to manage your action points, make judgements based on the percentage chance of your shots hitting and so on. However, it also began playing with ideas that would come to define the kind of strategy games that Mythos made.

"What I wanted to do with *Laser Squad* was bring more RPG elements into it," Julian tells us. "The fact that you can equip your squad this time, before going into battle, and have a sequence of missions which roughly followed a story. Although, you couldn't carry your characters over from one battle into the next, which would have been really cool – that's something I did for *Lords Of Chaos* that was a bit too much of a stretch for *Laser Squad*. The intention was that it had stuff that kind of made it into *X-COM* – the idea that you've got this squad, they're fighting battles and you're improving them as you're going on. That didn't quite make it into *Laser Squad* but we still had the multiple scenario format, we had the equipping system, the line

» [ZX Spectrum] In *Laser Squad*, you can see some of the systems that would go on to make *UFO* such a success.

games



» [PC] You can pause combat during *X-COM: Apocalypse*'s combat and issue orders, blending real-time and turn-based styles.

» [PC] UFO mythology gripped the world in the Nineties, as evidenced by the success of the *X-Files*. *UFO: Enemy Unknown* tapped into that fascination.

of sight system – that was not in *Rebelstar*, but we put it in *Laser Squad*, which was a big innovation. You could only see enemies if your soldiers had spotted them. That allowed for sneak attacks and deceptions and all the rest, which was very cool in multiplayer."

Julian tells us that the idea of the hidden movement system, a core part of *Laser Squad* and Mythos' games to follow, as well as the many titles influenced by the company's games, was something he first experimented with in tabletop gaming. "I actually designed a game which was based on hidden line of sight systems, but it required a referee. Each player would indicate where they're moving their characters, the referee would take the orders from the players, then fill in the parts of the map that they could see and if they'd spotted an enemy. It was pretty cumbersome as a board game but worked beautifully as a computer game."

Mythos' next game, *Lords Of Chaos*, moved away from sci-fi theming that was found in *Laser Squad*, but it continued developing the idea of blending RPG elements with strategy game design. "It's a follow-up to *Chaos*," Julian elaborates on the 1990 release. "The same basic idea that you're a wizard casting spells and summoning creatures. This time, definitely a much more role-playing focus because you can carry a wizard character over from one mission to the next. It was a much more involved game and in the initial design I wanted to create procedurally generated maps but that was a little bit of a stretch too far for a humble 48k Spectrum. There were all sorts of objects and items you could find around the map, you had to get keys to unlock treasure chests and doors, you had to find ingredients for potions and make the potions, the creatures you summon, if they could use weapons, they could find weapons and use them, you could enchant the weapons, and so on. It was quite involved."

Julian and Mythos Games' evolving approach to strategy was well received by critics in these early years, but was the company rewarded financially? No, not really," Julian responds. "With *Lords Of Chaos* it took a lot longer, because there were lots of versions, but our publisher Blade Software had financial problems of their own, so they were not able to produce enough units for the distributors, who were demanding, you know, 'we ordered this amount and we didn't get any'. We were a bit alarmed by this, so we broke our relationship with the publisher and decided to work on a prototype for *Laser Squad 2*." The decision would prove to be ▶

WHERE ARE THEY NOW?

Juilan Gollop

■ Juilan is now working in Sofia, Bulgaria where he has cofounded the company Snapshot Games. The studio's first game was a return to the *Chaos* series: *Chaos Reborn*. Snapshot's next title, *Phoenix Point*, is due to release this year. The game is a continuation of the *X-COM* legacy, with Snapshot promising deep strategic gameplay, research trees, scavenging, huge boss monsters and mutating aliens that evolve to respond to your tactics.

» [Amiga] The 16-bit versions of *Lords Of Chaos* were a big graphical update over the Spectrum original.

TIMELINE

1988 ■ Mythos Games is founded by Julian Gollop, his brother Nick and their father.

■ Mythos Games' first title *Laser Squad* is released for the ZX Spectrum. It would later be ported to Commodore 64, Amstrad CPC, MSX, Amiga, Atati ST and PC.

1990 ■ The sequel to one of Julian's earlier games, *Chaos: The Battle Of Wizards*, *Lords of Chaos* was released for ZX Spectrum, Commodore 64 and Amstrad CPC.

1991 ■ 16-bit versions of *Lords Of Chaos* were released for the Atari ST and Commodore Amiga.

■ A demo for the game that would become *UFO: Enemy Unknown*, *Laser Squad 2*, was completed.

1993 ■ Spectrum Holobyte aquires Microprose shares from Bill Stealey and orders UFO to be cancelled. The order is ignored.

1994 ■ Mythos' most famous and influential game, *UFO: Enemy Unknown*, is released.

1995 ■ A sequel to *UFO*, *X-COM: Terror From The Deep*, is released. Mythos is not involved, licensing the code to Microprose for it to develop the game internally.

■ Early work begins on *Magic & Mayhem*, but the company's focus is on developing an *X-COM* sequel.

1997 ■ A third *X-COM* game, this time developed by Mythos, is released in the form of *X-COM: Apocalypse*.

1998 ■ Mythos returns to a fantasy setting with RTS title *Magic & Mayhem*, published by Virgin.

2001 ■ Titus Interactive, who had bought Virgin from Interplay, cancelled Mythos next project, *The Dreamland Chronicles: Freedom's Ridge*, forcing the company to close down.

» [Amiga] Summoning creatures like demons, beasts and vampires to do your bidding rather than doing the work yourself is the way to go in *Lords Of Chaos*.

▶ a significant one, leading to what would be the most important period in the company's history.

After running out of money, Julian started doing some database programming on the side, while Nick finished the demo for *Laser Squad 2* on Atari ST so that Mythos could start looking for a new publisher. Their number one choice was Microprose. "We thought it was unlikely that they would take us on, because we thought Microprose was the best computer games company in the world," remembers Julian. "But they did, partly because Steven Hand, who was one of the designers there, was a really big fan of *Laser Squad* and he lobbied pretty hard for Microprose to take the game.

"Microprose wanted some changes," Julian continues. "The main thing they were obsessed about was how can we make a game like *Civilization*, that has as big an impact as *Civilization*, because Microprose UK

FIVE DEFINING GAMES

LASER SQUAD

■ A turn-based tactics game that first released on the ZX Spectrum, *Laser Squad* was Mythos' first release and featured many of the elements that would eventually make it into the *X-COM* series, including action points, a squad-based combat system and a morale system that could see soldiers panicking and the player losing control.

LORDS OF CHAOS

■ Released for 8-bit systems in 1990 and 16-bit systems in 1991, *Lords Of Chaos* was a sequel to *Chaos: The Battle Of Wizards*, released in 1985. You play as a wizard who could cast spells and summon creatures to fight alongside them. The game saw Mythos continue to infuse its strategy with role-playing elements.

» [PC] Upgrading your base and equipping it with scientists and engineers to help you get better equipment is a key part of *UFO*.

» [PC] On *UFO*'s Geoscape, you send out Interceptors to try and take down alien ships before they land.

were fed up as being the toy division of Microprose. Microprose US was doing all the serious games and Microprose UK was doing consoles and conversions and not having serious internal projects". Mythos were told the game had to incorporate several *Civilization*-like features, including an extensive research tree and a Civilopedia-esque feature where you could look at all the things you'd discovered in-game. Finally, they asked that the game's theme be based on Gerry Anderson's Seventies TV series, *UFO*.

Julian tells us that though he was worried about the increased scope of the project, he was mostly happy with the changes. "I went away for a few days and came up with a design which I thought was pretty cool. The original design document for *UFO: Enemy Unknown* was about 12 pages long, but it had all the elements there that made it into the final game. One thing I changed from what they wanted, I thought Gerry Anderson's *UFO* was a bit boring. The aliens in *UFO* were like humans, basically. I decided to take some stuff from contemporary UFO mythology. This came from a book called *Alien Liaison* by Timothy Good." From here Julian plucked the alien greys that would appear in the game and got the idea of allowing players to reverse-engineer UFO technology, based on claims made about Area 51 by Bob Lazar in *Alien Liaison*. "The bit we kept from Gerry Anderson's *UFO* was the idea of multiple levels of interception," Julian continues. "You can have air-based and ground-based interceptions. All those ideas came together very, very quickly."

> **"Microprose decided to ignore the order and keep the project going clandestinely"**
> Julian Gollop

The game's development was not without problems. In fact, the game was 'cancelled'. "We didn't know about it," says Julian. "What happened was that Bill Stealey, who was the major shareholder in Microprose, sold his shares to Spectrum Holobyte. They visited the Microprose UK studios, took a look at *UFO* and said, 'This looks crap, cancel it.'" Fortunately for Mythos, however, Microprose decided to ignore the order and keep the project going clandestinely based on positive feedback from the QA team. "They kept it going until such point as Spectrum Holobyte were facing financial difficulties and they demanded that Microprose UK come up with the goods. They wanted projects to be released before the end of their financial quarter in 1994. Microprose UK said, 'Well, you know that project you didn't like? It's kind of still going'. They said yes."

In *UFO: Enemy Unknown*, the systems and ideas Julian and Mythos had been playing with throughout their history came together perfectly, making it Mythos' most successful and influential game. "I think finally in *UFO*, the role-playing aspects of it come to fruition," Julian says, reflecting on ▶

UFO: ENEMY UNKNOWN

■ Also known as *X-COM: UFO Defense* in the US, this is Mythos' defining game. You control the X-COM organisation and must protect the earth from alien incursions. Half of the game takes place in the Geoscape, where you build bases, deploy aircraft, hire staff, manage finances, research tech and try to keep the globe's nations happy.

X-COM: APOCALYPSE

■ *X-COM Apocalypse* moved from a global scale to a city run by corporations. The game had interesting ideas, including the introduction of pauseable real-time combat and a faction system that required you think carefully about your relationships with other organisations in the city and the potential benefits of helping them grow or wane in power.

MAGIC & MAYHEM

■ Mythos' final game is an RTS featuring RPG elements and a continuation of the legacy of the *Chaos* games. While playing through the game, you collect ingredients which can be shuffled between the law, neutral and chaos lines in your Portmanteau spell book, changing their effects and allowing you to equip your wizard with a variety of different spells.

» [PC] A couple of silly mistakes in *UFO* and a mission can easily end up in disaster.

> **"They said, 'No we want to market this as an RTS, role-playing games don't sell'"**
> Julian Gollop

INSTANT EXPERT

- Mythos Games is best known for creating the *X-COM* strategy series.
- Mythos Games was cofounded by Julian Gollop, his brother Nick Gollop and their father.
- Mythos Games was based in Harlow, England.
- Prior to founding Mythos Games, Julian Gollop created *Time Lords*, *Islandia*, *Battlecars*, *Nebula*, *Rebelstar Raiders*, *Chaos: The Battle Of Wizards*, *Rebelstar Raiders*, *Rebelstar* and *Rebelstar II*.
- Mythos Games was preceded by Target Games, which consisted of Julian Gollop, his father and Ian Terry.
- Mythos worked with several publishers over the course of its history: Blade Software, Microprose, and Virgin Interactive.
- Mythos Games lasted for 13 years. It was founded in 1988 and closed its doors in 2001 after Titus Interactive, which had purchased Virgin, cancelled the studio's next project: *The Dreamland Chronicles*.
- The studio was known primarily for its turn-based strategy combat, though it also experimented with real-time systems.
- Mythos most successful game was the first in the *X-COM* series, *UFO: Enemy Unknown*. The game sold over 600,000 copies on PC alone.
- The studio's games were heavily influenced by tabletop games like *Dungeons & Dragons*.

what made the game work. "The idea that you have this squad, you recruit them and can name them and nurture them, you try and get them to improve by sending them on missions but sending them on missions is very risky. You've got this constant dilemma: I want to succeed at missions, I need my best soldiers, but I don't want them to die."

Following the game's success, Microprose told Mythos they wanted a sequel done in six months. Mythos baulked at the idea and ended up licensing the code to Microprose to develop the sequel, *X-COM: Terror From The Deep* (though it ended up taking Microprose 12 months). Mythos was also persuaded to start work on another follow-up game, rather than the original project it had initially hoped to do. This would become *X-COM: Apocalypse*.

"We had a lot of problems with the development there," Julian recalls. "The main things was the shift from turn-based to real-time. The RTS wave was about to hit, so I thought, let's try and make a real-time combat system. It's not an RTS in what people imagine an RTS to be but still it had real-time. Our innovation was you can pause the game action by hitting the space bar and then give orders to your soldiers to your heart's content and then hit the space bar again and that would unpause the game. That was really tough.

"The other problem we had was with the art," Julian continues. "The art was being done entirely in-house at Microprose UK in a similar arrangement to what we had before, but they put a larger team on it and they sort of tried to redesign the game for us. The art team was saying we know how to make games, you don't, therefore you should do it like this, this and this. We had to argue a lot over some of these things. They had problems just producing the stuff, particularly because we required isometric graphics which were all chopped up into these little tiles and they were trying to use 3D software.

"It was pretty difficult. Bizarrely, for the aliens, they had this famous science fiction artist [Tim White] design the enemies in plasticine – giant plasticine models – and they were going to scan them into their 3D software, which didn't work. They had to hastily design and build the aliens in their 3D software and they didn't come out too well. They were little blobby things. We went through several different producers, which caused problems," Julian says. "That was until our final producer James Hawkins, who was actually good. We managed to get the game finished with him, finally.

"I wasn't terribly happy with it," Julian reflects. "I wasn't happy with the art, I wasn't happy with the level design. I was quite proud of some aspects of it:

THE DNA OF MYTHOS GAMES

STRATEGY

■ Mythos was, fundamentally, a strategy game studio. From the tactical combat of *Laser Squad*, through to the mythical fantasy realm of *Lords Of Chaos*, to the blend of organisational management and turn-based battle of *X-COM*, all are connected by a focus on deep strategy systems that create thrilling emergent moments through a combination of complex systems.

INNOVATION

■ The hidden sight system introduced by Mythos is just one example of the innovative systems Mythos Games introduced. *X-COM*'s fantastic success would go on to influence many games. *Diablo*, for example, was originally intended to be a *UFO*-like title before a switch to real-time combat was made and *Baldur's Gate*'s pauseable combat system was directly inspired by *X-COM: Apocalypse*.

I thought the real-time system was quite cool and worked quite well. It was a mix."

By the time of Mythos Games next title, the interesting *Magic & Mayhem*, the studio was with a new publisher in Virgin Interactive and again found itself being pushed in directions that it wasn't comfortable with. "Again, this was supposed to be an evolution of the *Chaos*/*Lords Of Chaos* systems, Julian explains. "You were a wizard, you're casting spells, a lot of it involved summoning creatures. We started work on it in 1995 before *X-COM Apocalypse* finished, but the whole team wasn't on it until *Apocalypse* had finished and then it was released in 1998. By that stage, turn-based games were nowhere. Everything was RTS games. The PC games market was saturated with them. So, we felt we had to make a real-time game. We wanted to evolve the role-playing game aspect of it a lot more, but Virgin pushed back very heavily. They said, 'No we want to market this as an RTS game, role-playing games don't sell, there's no way in hell'. This, of course, was before *Baldur's Gate* was published, which proved that role-playing games do sell, if they're done right.

"The other focus of *Magic And Mayhem*, which was a big thing for us, was network-based multiplayer, which was a very important feature of RTS games at that stage. I think I focused a bit too much on the multiplayer stuff. I think the single-player suffered a bit from a number of problems: the AI of your companion characters, the level design being a bit repetitive in places, a slightly incoherent story which we had to try and get together rather quickly. It had problems."

Mythos briefly began work on *Magic And Mayhem 2*, but given that the first didn't sell well, decided to return to what they did best with its next project. *The Dreamland Chronicles: Freedom's Ridge* was conceived as a PC and PS2 successor to *X-COM*. You would take control of an X-COM-style organisation fighting against an alien force that had conquered the earth. Unfortunately, it never saw the light of day.

"The problem we had was that we signed a four-game deal with Virgin," Julian explains. "They had a sequence of disasters: first they sold Westwood Studios to EA, so they lost a major part of their development effort; then they were sold to Interplay; Interplay folded and sold to Titus Interactive. Titus Interactive were not interested in *Dreamland*. If the publisher decides we are not going to fund the development of your game, we are not going to release you from the deal, you are stuck in limbo. You can't do anything. We can't go to another publisher and sell the company. We can't finish the game we are working on because we've run out of money. The only situation there is to liquidate the company. That was the sad end of Mythos Games."

Though Mythos is long gone, its legacy is not. The studio's approach to strategy was incredibly influential and the formula it established has held long-lasting appeal, as demonstrated by the success of Firaxis' rebooted *XCOM* series. On his part, Julian continues the Mythos legacy at Snapshot Games, where he is working on *Phoenix Point*, the spiritual successor to *X-COM* that *Dreamland Chronicles* never had the chance to become. ★

» [PC] *Magic & Mayhem* was Mythos' first attempt at a true real-time strategy game.

WHAT'S OLD IS NEW

Julian Gollop explains how his new title, Phoenix Point, will revitalise some of Mythos old ideas

"There are some elements from *Dreamland Chronicles* in there. In particular, the free-aiming mode which is an important feature of *Phoenix Point* where you can shoot from the point of view of the soldier. You can target individual body parts, like a VATS style system. What I wanted to evolve from *X-COM Apocalypse*, which I thought was cool but a bit underdeveloped, was you have this alien threat which is overhanging the future of humanity and yet you have different human factions which are kind of suspicious of each other or even directly hostile to each other. In the case of *Phoenix Point*, we have these three main factions and they each have their own ideology, structure and technology. They each have their own solution to how to deal with the alien threat. The problem is that the solutions they have are mutually exclusive. I can't reveal exactly what the endings are, but it gives the player an interesting choice."

BOARD GAMING

■ The influence of tabletop gaming in the titles Mythos produced is huge and clear to see, especially in the studio's isometric titles. The interest in strategy, squad-based combat, the use of action points, morale systems, encumbrance systems, and so on: these are all things taken from the world of *Dungeons & Dragons*, and the games produced by SPI and Avalon Hill.

ROLE-PLAYING

■ The desire to mix role-playing elements into the strategy formula is something Mythos experimented with from its outset. This includes the ability to create, upgrade and carry over characters into each mission, which began with *Lords Of Chaos* and was carried over into *UFO: Enemy Unknown*, the implementation of faction systems in *X-COM Apocalypse* and the experience points system in *Magic & Mayhem*.

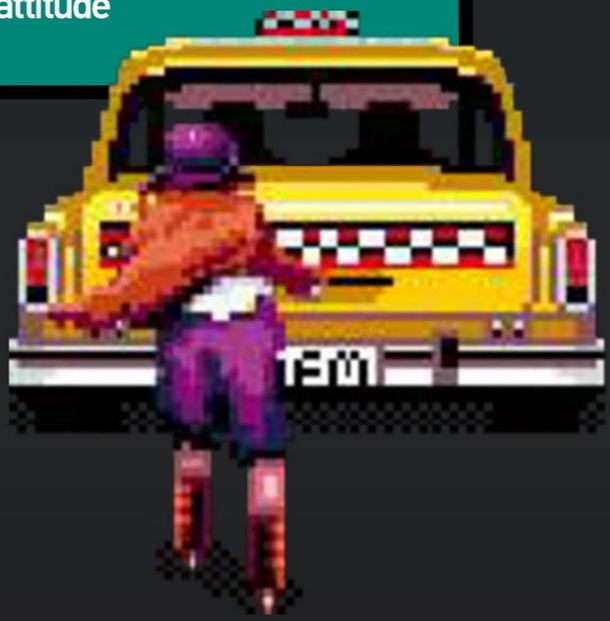
MULTIPLAYER

■ Multiplayer has always been important to Mythos, partly because of the influence of tabletop gaming. This is evident in Mythos' early games: though it supported single-player, it was always anticipated that *Laser Squad* would be played in multiplayer and *Lords Of Chaos* supported up to four human players. In its last game, *Magic & Mayhem*, that commitment to multiplayer remained, with focus placed on its LAN multiplayer.

THE MAKING OF SKITCHIN'

We strap on some skates and grab onto the tail-end of Dave Warfield's car to ask him about the creation of this cult Mega Drive racing game that is drenched in Ninteties attitude

Words by Adam Barnes



» [Mega Drive] Skitching is illegal, so don't act surprised when the police cruisers show up to kill your speed.

Some games are timeless classics. Boot them up and it might as well be that the decades since their release never even happened. *Sonic The Hedgehog* remains as excellent now as it ever did. *Streets Of Rage* is still as fun as it ever was, even with its clear Nineties vibe. Even the into-the-screen, kinda-sorta 3D of *Road Rash* still conjures up the same sense of speed as it did the very day it released back in 1991. Then there are games like *Skitchin'*, games that are so of their time that it's hard not to be amused when seen through a modern lens. That's not to say there isn't a great game underneath all that radical dialogue and the graffiti-based menus that typify the attitude of the era, but if there's ever a game that is firmly rooted in the Nineties, it's definitely *Skitchin'*.

"Early on I worked for a company called Distinctive Software," says Dave Warfield, the designer of *Skitchin'*, about how he came to work on the game. "They were purchased by EA and became EA Canada and at that time we were working on *NHL Hockey*, some NBA stuff, and we were looking to create some new titles." Dave goes on to explain that he and the team took part in 'roundtables' to flesh out some potential ideas for new games. "I was seeing these articles about people rollerblading in New York City, grabbing onto the back of taxis and buses and getting around the city that way. The skating/hitching part of the article kind of leapt out at me and I said, 'There's a game in that.' So we just kind of put it together as 'skitchin' and started brainstorming what that game might be, and kind of pitched it."

» [Mega Drive] If other racers are fighting each other, that sometimes gives you the chance to sneak on by without danger.

The concept was simple: a racing game that didn't use supercars and motorbikes, but instead the thrill of launching yourself forward by using the speed of another vehicle. "It was kind of a mix of different things," adds Dave of the initial game's idea. "We started mapping out this national or international racing event that was underground. Grabbing onto the back of cars and buses in rollerblades is still not legal so we gave it this underground feel of races that were taking place across different parts of Canada and the States."

The advantage of being part of the Electronic Arts machine meant that the company as a whole could share among the various in-house studios, and with *Road Rash* having been released in 1991 and proven to be popular, the direction of this new idea was obvious. "Because of the way that the concept was going, we talked to the team that made *Road Rash* and got hold of the engine and started doing some early prototypes," says Dave. "And so the combat was already there, you could grab onto things and hit each other, but we had to get the hitching working right. So we figured that because it was this underground thing, there was this no-holds-barred mentality – you did what you had to do to win the race. So we added in a lot of those elements and built on a lot of what *Road Rash* was doing." Dave suggests that the idea was to separate itself from what its predecessor had been doing so that "it wouldn't be just another *Road Rash* game", and this is where the core gameplay mechanic of grasping onto vehicles to build momentum and fling yourself ahead was devised. "We wanted particularly to make it so that it wasn't just a case of putting your finger on the accelerator, you had to use the vehicles to slingshot and gain speed. If the slingshot didn't work, I don't think it would have been a fun game."

Interestingly, the team behind the game ended up using real-world reference points to get a sense of believability about the game, and even went to the local skate park to chat to some of the people that were into the craze of rollerblading. "We had a guy that was doing a lot of rollerblading at a skate park and putting up with a lot of grief because of that," recalls Dave. "They had created an enclosed trick park, if you could call it that, that was open to both rollerbladers and skateboarders and [we] ▶

IN THE KNOW

» **DEVELOPER:** EA CANADA
» **PUBLISHER:** ELECTRONIC ARTS
» **RELEASED:** 1994
» **PLATFORM:** MEGA DRIVE
» **GENRE:** RACING

Skitchin' USA

What to expect from each gnarly stage

▲ VANCOUVER, BRITISH COLUMBIA

■ As the first stage, this is naturally the easiest with only one lane of traffic and fewer obstacles to avoid.

▲ SEATTLE, WASHINGTON

■ The cops start to show up here, lanes are closed into single-line traffic and enemies carry weapons.

▲ WASHINGTON DC

■ There's a lot of crap on the floor in Washington, it seems, so you'll need to be careful where you stop.

▲ CHICAGO, ILLINOIS

■ Not the longest track on the game, but certainly a challenge when combined with the difficulty of the enemies.

▼ DENVER, COLORADO

■ Tricks are the goal of this stage, with trucks and trains required to launch yourself over making their debut.

▼ SAN FRANCISCO, CALIFORNIA

■ No jumps at all on this one, just a lot of sharp bends meaning there's need for care when slingshotting.

▼ TORONTO, ONTARIO

■ Dual-lane bumps make an appearance on this stage, the perfect opportunity to score some bonus trick cash.

▼ MIAMI, FLORIDA

■ The thrill of racing towards the beachside is strong here, but the track can take a turn for the worst quite suddenly.

▲ SAN DIEGO, CALIFORNIA

■ There are a lot of cars on these dusty roads, which can be a big bonus for those with great slingshotting skills

▲ LOS ANGELES,

■ Drivers will start popping their trunks on this stage, so you'll need to duck when skitching to avoid being thrown off.

▲ DETROIT, MICHIGAN

■ For the bonus stage you'll need to fight a lot, and many of the skaters have pretty powerful weapons.

▲ NEW YORK, NEW YORK

■ The final stage and obviously the toughest of them all. NYC taxi drivers don't want you grabbing onto their cars.

Eating the pavement

Avoid these Skitchin' endings

LOST THE RACE

■ If you aren't able to at least make it into the top six of the leaderboard, then you'll not be able to progress onto the next stage. If you don't have the necessary funds to pay for another entry fee – which is hard to do – then it's game over for you.

ENERGY RUNNING OUT

■ This is likely to happen especially on the later stages, but if you run out of health – whether you are hit by a car or smacked by a baseball bat – then the race is over. You'll need to keep enough money for the medical fees to continue on.

CAUGHT BY POLICE

■ The police will appear periodically throughout the game, and they can be tricky to avoid. Skitching can lead you to getting busted, so you need to make sure you're slingshotting as soon as you can, otherwise you'll need the bailout money.

CAN'T REPLACE SKATES

■ Not paying enough attention to the state of your skates can cause them to blow out. In the later stages, the professional wheels and the skates themselves can be quite costly – so it's good to stay on top of any potential damage.

» [Mega Drive] New elements were introduced into each level as you progressed, giving the player something new to adapt to.

» [Mega Drive] The city levels were overcast and more muted in their palette, an intentional means of recreating a certain vibe.

▶ talked to those guys quite a bit about the types of tricks that they were able to do, and that sort of thing." This is where the idea to implement tricks into the game came about, enabling a fun third layer of gameplay on top of the racing and combat that had been brought over from the *Road Rash* engine. Dave explains that this led to the inclusion of secrets behind billboards or at the top of jumps. But these rollerbladers even provided assistance when it came to capturing the right 'look' of the animation, an aspect of the game that it would later go on to be highly-praised for.

"When it came to looking at what the animations would look like and what the tricks were, we actually brought some of those guys into a warehouse, had a little Fiero that they could hold onto the back of and had ramps and stuff with mats, and we actually did the tricks and recorded them and rotoscoped it so that it looked real for the animations."

An equal amount of effort and detail was put into the locales, too, with an intention to create a unique identity to each stage. "We tried to take cities that we thought were interesting, cities that had a specific feel to them," explains Dave. "Vancouver had a very specific style of house that was along some of the roads that we were able to incorporate. New York has a bigger city feel to it, so we were able to find cities that were different enough from each other that gave it a different feel as you were moving from city to city." The team also considered the likes of *The Great American Road Race* or *Cannonball Run*, we're told, to help them think about the cities that it needed to include. But when it came to actually mapping out each stage, the team at EA Canada found doing so by hand helped it get a sense of the right progress. "We had to draw it out on paper first just to kind of look at what were the art elements that we would need to add in to dress it up to look more like wherever it might be. We tried to map out a rough trail of the types of things that we would want the player doing through the map on paper and then put it into this engine and then created it much like you would if you were creating a Hot Wheels racetrack, piece-by-piece as you move your way through."

This allowed *Skitchin'* to create a 'cool' attitude that was very in-keeping with the Nineties, leveraging the Seattle grunge music that was popular at the time and the use of graffiti helped to create a very particular identity to the game, though EA didn't necessarily think it was quite distinct enough at first. "Being part of EA, it's not just a case of going ahead and making whatever we want," reveals Dave. "There are approval processes that you have to go through. And in the initial versions of the game a lot of the comments we got – especially because we were working with the *Road Rash* team – was that it felt a little too similar to *Road Rash*, and what could we do to differentiate it?" This was where the emphasis for the slingshotting mechanic was nailed down, but it also lead to the implementation of the RPG-like mechanics where

» [Mega Drive] The changing landscape was largely a palette swap, your skater's clothes also change with the location.

"TO BE HONEST, WE NEVER THOUGHT ABOUT WHAT IS GOING TO DATE US"

Dave Warfield

the player could upgrade their equipment as they progressed. "That wasn't in the original design," Dave adds, "and we started looking at different elements to add. We had been working with Gary Gygax [creator of *Dungeons & Dragons*] in the past on *Dangerous Dimensions* games, so some of those RPG elements came in. We could have some upgrades that you could earn." The team found itself asking what the point of winning a race was and, if the player won, what rewards would they get? "That naturally evolved to the fact that if they're wearing different gear, how does it protect them or what abilities does it give him?"

Despite taking the foundation for the game from *Road Rash*, the resultant game was quite a bit different to it and many other similar racing games of the time. Releasing in 1994 exclusively for Mega Drive, *Skitchin'* inadvertently created a time capsule of sorts by epitomising the Nineties with its punk rock visuals and Nirvana-inspired soundtrack. "To be honest, we never really thought about what is going to date us," admits Dave. "We thought about what's popular right now, what's interesting, what's unique to this game that would make it appealing right now? It's only looking back that we kind of go, 'Oh wow, that Seattle grunge sound!' or get a little shocked by the colourful stylings of graffiti."

Sadly, however, the relevance that it might have had at the time didn't carry over to wider commercial success. Dave blames the marketing for this – "They were a little scared of this product," he says, alluding the illegal and dangerous nature of the sport – but the team felt that it was onto something special. "Our hopes were very high because it was something different than the traditional racing game," recalls Dave, "but I think from a marketing and sales standpoint it was very hard for them to figure out what it might do because it didn't have that comparable. The hopes were high, we thought it would have an appeal to the rebellious youth, if you want to call it that, at that time period."

Skitchin' remains a novelty, an enjoyable game with a twist that was overlooked. "Maybe it didn't sell as well as we would have hoped," says Dave, "but the people that did play it enjoyed it, and here we are 20 years later, you're asking me about it. It still has that nostalgia attached to it for the people that played it. I had a ton of fun building it and playing it against people after we had released it." ★

» [Mega Drive] Though the developers didn't intend it to be, *Skitchin'* acts as a perfect time capsule for the mid-Nineties.

DEVELOPER HIGHLIGHTS

NEED FOR SPEED: HIGH STAKES (PICTURED)
SYSTEM: PS1, PC
YEAR: 1999

SSX TRICKY
SYSTEM: GAMECUBE, PS2, XBOX
YEAR: 2001

DEF JAM VENDETTA
SYSTEM: GAMECUBE, PS2
YEAR: 2003

Hyper Duel

SCINTILLATING, EXHILARATING, EXPENSIVE!

» SATURN » 1996 » TECHNOSOFT

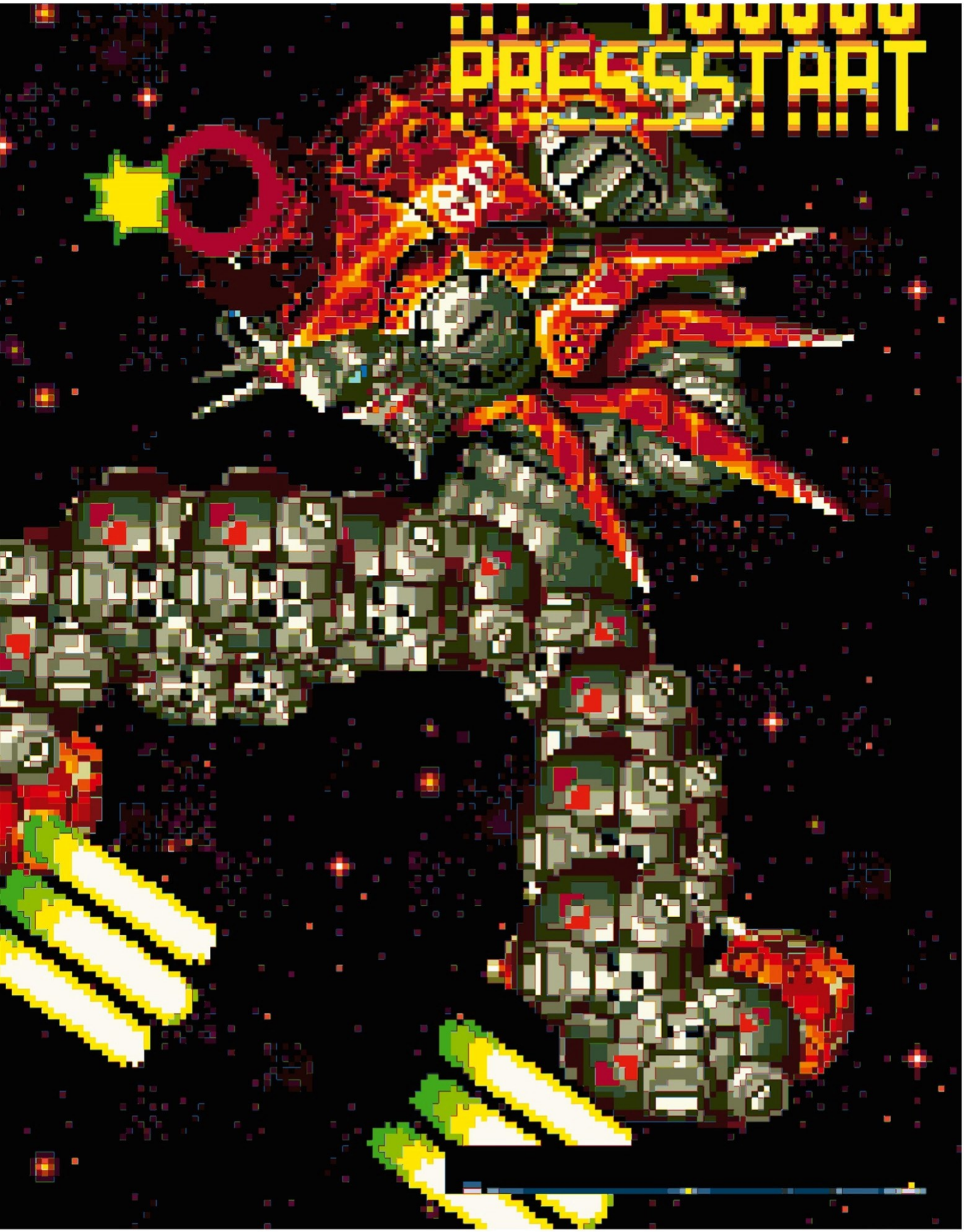
Recently I was lucky enough to pick up a very reasonably priced PVM. It's a Sony Trinitron PVM-20M2E and it looks incredible and I've become one of those gamers that take every opportunity to show off images of it in action. "Look at the SCANLINES," I'll scream to anyone nearby, whether they're interested in looking at it or not.

Needless to say my time with it has been made up of throwing anything and everything at it to see what looks great, and one of the games I've been spending a lot of time with is a fantastic Saturn shooter and one of Technosoft's last original shoot-'em'ups on the system: *Hyper Duel*.

It's instantly recognisable as a Technosoft game, too thanks to its boisterous soundtrack, meticulous sprite and ship design and punchy looking visuals that are considerably heightened by the Trinitron's razor-sharp screen. In fact, if it weren't for the fact it features the ability to transform into a robot, you'd probably swear it was part of the *Thunder Force* series at first glance. While it's actually a conversion of the company's 1993 arcade game, Technosoft wasn't skimpy with the extras, delivering a brand new exclusive 'Saturn' mode, which not only enhances *Hyper Duel*'s aesthetics but also adjusts the control setup for the game.

Regardless of which mode you end up playing, each version allows you the opportunity to switch forms between a tooled-up spacecraft and a powerful, but slower moving mech that boasts immense firepower. Interestingly for a shoot-'em-up, *Hyper Duel* doesn't feature any smart bombs. Instead it allows you to bounce high-powered lasers around the screen, which last as long as their charge does. It's a neat mechanic and you'll need to study each stage to work out when best to use this screen-clearing effect. Another nice touch is that stages are continuous, simply carrying on immediately from where the last one ended.

Highly collectible nowadays (you'll be lucky to find a complete copy for less than £300) *Hyper Duel* has everything you want from a shooter and while its levels are short its inventive bosses and satisfying shooting more than makes up for it. And did I mention it looks amazing on my new PVM? ✱


PRESSSTART

Minority Report

INTERESTING GAMES YOU'VE NEVER PLAYED

AMIGA CD32

Released in September 1993, the Amiga CD32 was Commodore's last roll of the dice – eight months' later, the company was bankrupt. The vast majority of the CD32's nearly 180 games are straight conversions of old Amiga titles, but it's also home to some hidden gems and superior versions of certain games

Words by Lewis Packwood

GUARDIAN

■ DEVELOPER: **ACID SOFTWARE** ■ YEAR: **1994**

■ **Sometimes we think of *Guardian* and weep for what could have been.** It crept out as a CD32 exclusive in December 1994, a full eight months after Commodore had declared bankruptcy and at a time when the CD32… well, it was beyond its death throes and more like in an advanced state of rigor mortis. As a result, few people have ever heard of this game. And that's a shame, as it's wonderful.

Guardian is essentially *Defender* in 3D. A huge mothership drops off a flock of 'Dronoids' at the start of each level, and your aim is to destroy them all before they blow up all of the buildings you're tasked with protecting. But in addition to these Dronoid bombers, there are all sorts of other tanks and aerial ships with different attack patterns, so the game evolves into a frantic dance in which you constantly switch priorities between downing aggressive attackers and blowing up the Dronoids that are taking out the city below.

And it's fast. Screenshots don't really do *Guardian* justice, the still polygon slabs giving no hint as to the smooth but hectic gameplay. Your ship is incredibly agile, and blessed with a joyous flip manoeuvre that allows you to double back and take out pursuing enemies in a satisfying shower of triangles. The flat, untextured polygons might look basic by today's standards, but 3D games were in their infancy back in 1994, and there were hardly any titles like it at the time.

Many people compare *Guardian*'s polygonal looks with *Star Fox*, which was released around a year earlier for the Super NES, but really the games couldn't be more different. Whereas *Star Fox* is a fairly sedate on-rails shooter, *Guardian* provides fast-paced arcade thrills with complete 3D freedom. And once you've successfully wiped out all the waves of attackers, your craft is swept into the belly of the mothership for a final showdown. If you can take out all of the glowing cores inside, the massive UFO explodes while you flee, victorious, ready to face the next wave.

There's some variety to the look of the different levels, with the green fields of level one replaced by pyramids later on. But really the main difference is in the numbers of enemies you face as you progress, with increasingly deadly types of foes introduced as the game goes on. Like its inspiration,

» [CD32] Ignore the Amiga 1200, port as *Guardian* on the CD32 is the real deal.

Guardian is a test of nerve: there's no save game to fall back on, and each session is a frantic back and forth between defending yourself from fighters and taking out the Dronoids that are destroying buildings below.

The game's New Zealand-based developer, Acid Software, was also responsible for the phenomenally good racing game *Super Skidmarks*, and it converted *Guardian* to the Amiga 1200 a few months after its CD32 launch. But that version is a poor cousin to the CD32 original, lacking music and sacrificing frame rate to keep the game running at a decent clip. The music in particular is a keen loss, as *Guardian* throws out some pretty fantastic tunes. In short, *Guardian* is the CD32's killer app – it just arrived a little too late.

IF YOU LIKE THIS TRY...

DEFENDER
ARCADE

■ *Guardian... Defender...* geddit? Acid Software's magnum opus is a barely disguised love letter to Eugene Jarvis's legendary 2D arcade shoot-'em-up – and, in fact, the developers coded an Amiga shareware version of *Defender* the year before *Guardian*'s release. *Defender*, unsurprisingly, holds up exceedingly well today, too.

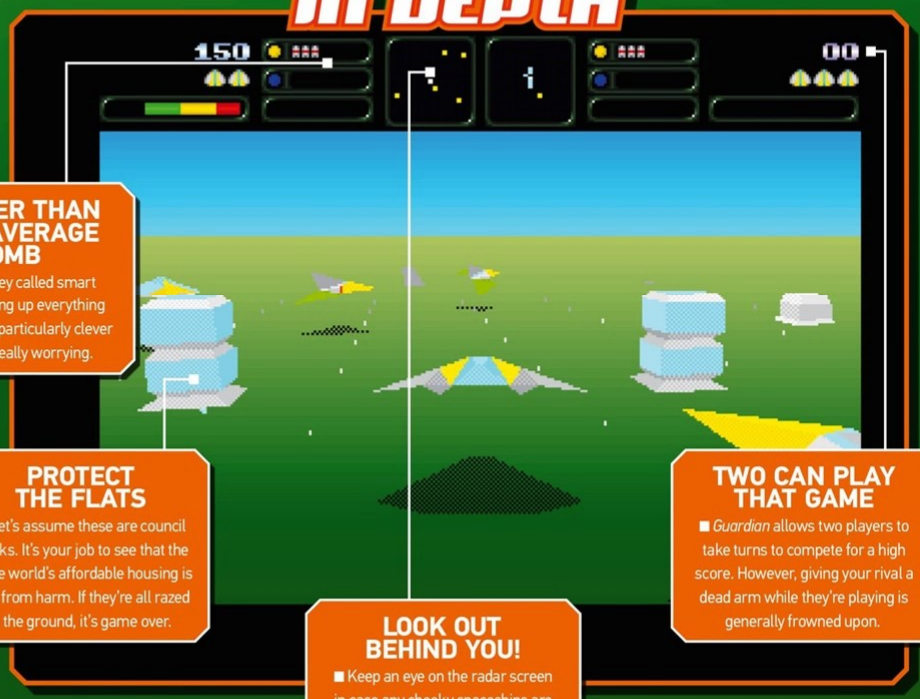
STAR FOX
SNES

■ *Star Fox* lacks the speed and freedom of movement of *Guardian*, but graphically it's very similar. To achieve those visuals on the SNES, developer Argonaut had to leverage the power of the Super FX chip. Both games suffer from horrendous pop-in, although this is less noticeable in *Guardian* thanks to its super-fast gameplay.

STARGLIDER
AMIGA

■ Coded by Jez San years before his company Argonaut made *Star Fox*, *Starglider* has more in common with the free form combat of *Guardian* than the Nintendo game. The wireframe graphics look dated by today's standards, for sure, but at the time, in 1986, they would have blown your mind.

IN DEPTH



SMARTER THAN YOUR AVERAGE BOMB
■ Why are they called smart bombs? Blowing up everything on-screen isn't particularly clever – more just really worrying.

PROTECT THE FLATS
■ Let's assume these are council blocks. It's your job to see that the game world's affordable housing is safe from harm. If they're all razed to the ground, it's game over.

LOOK OUT BEHIND YOU!
■ Keep an eye on the radar screen in case any cheeky spaceships are sneaking up behind you. A quick flip will let you turn the tables.

TWO CAN PLAY THAT GAME
■ *Guardian* allows two players to take turns to compete for a high score. However, giving your rival a dead arm while they're playing is generally frowned upon.

Minority Report

DIGGERS

■ PUBLISHER: **MILLENNIUM INTERACTIVE** ■ YEAR: **1993**

■ ***Diggers* was bundled with the CD32 at launch and was a rare console exclusive, although it was later converted to the Amiga 1200 and PC.** And for a launch game, it's good. Many have compared it with *Lemmings*, but besides some superficial similarities, there's little overlap between the two.

The game is set over 34 huge levels, and the aim is to dig through the soil to reach gemstones buried below. You complete each level by mining enough gemstones to meet the level's credit quota, but there's also a rival team of diggers racing to reach that quota, too. Your five-strong mining team are each controlled individually, and you can order them to walk, dig, pick up objects, and so on. But they're also fantastically stupid, and think nothing of walking into a lake and drowning, so each requires careful shepherding.

There's huge depth here (sorry), particularly in the way you can use credits to buy faster mining equipment. Do you divert funds away from reaching your credit goal in the hope of gaining more gems through better mining tools? And then there's the option of sneaking into your rivals' tunnels to steal their gems before they reach them, at the risk of your diggers being beaten to a pulp by burly, angry enemies. Plus there are four mining races to choose from, each with different strengths and weaknesses, and because your miners can't scale anything steeper than a gentle slope, your excavations require careful planning to avoid cutting yourself off from the tunnel network above.

A word of warning, though: it's practically unplayable with the gamepad, but luckily it's easy enough to plug in a mouse. And the same caveat goes for a certain game starring a man named after a can of beer.

» [CD32] *Diggers* started off life as a CD32 exclusive, but was eventually released on both PC and the Amiga 1200.

» [CD32] The small sprites are actually very useful as they allow you to see more of the playing rea, which is very handy.

MORE GAMES TO PLAY

» SOCCER KID

■ DEVELOPER: **KRISALIS**
■ YEAR: **1994**

■ The CD32 version of *Soccer Kid* adds an animated intro with a plucky voiceover detailing the absurd plot: aliens have stolen the World Cup, for reasons, but their spaceship crashes and pieces of the trophy have been scattered to the four corners of the Earth. The game is brutally hard by today's standards, but the sheer novelty of using a football to defeat enemies makes this curio worth checking out.

» THE CHAOS ENGINE

■ DEVELOPER: **THE BITMAP BROTHERS**
■ YEAR: **1994**

■ Another game with a fancy intro added for its CD32 incarnation, this port is arguably one of the best versions of *The Chaos Engine* out there. The graphics are far more vibrant than the Amiga 500 version – although some prefer the muted palette of the earlier effort. Still, the brighter colours do make the game easier to parse: the enemies stand out from the background rather than getting lost in a smear of grey on grey.

» ULTIMATE BODY BLOWS

■ DEVELOPER: **TEAM17**
■ YEAR: **1994**

■ Objectively speaking, *Ultimate Body Blows* is not very good. But as a nostalgia hit it's wonderful, a reminder of the time when devs were falling over themselves to cash in on the success of *Street Fighter II*. Plus the CD32 version included all 22 characters from *Body Blows* and *Body Blows Galactic*. The line-up included a man riding a dinosaur, which is surely worth the price of entry.

» DEFENDER OF THE CROWN II

■ DEVELOPER: **SACHS ENTERPRISES**
■ YEAR: **1993**

■ This follow-up to Cinemaware's massively popular *Defender Of The Crown* was exclusive to the CD32, but despite the number two in the title, it wasn't actually a sequel. In fact it was more of a remake, featuring the same plot as the first game, only with improved graphics, full voiceover and a number of tweaks including more nuanced swordfighting and catapults that shoot fireballs.

BENEATH A STEEL SKY

■ PUBLISHER: **REVOLUTION SOFTWARE** ■ YEAR: **1994**

■ **Some people think that *Broken Sword: Shadow Of The Templars* is the pinnacle of Revolution Software's development history, but sadly they are quite, quite wrong.** For it is this, *Beneath A Steel Sky*, a cyberpunk romp through an Australian city divided between privileged penthouse dwellers and the dispossessed who scrabble for survival at the foot of the elite's shining skyscrapers. Even 25 years later, the game looks remarkably good.

The Amiga original came on an astonishing 15 floppy disks, which meant switching areas involved a tedious amount of disk swapping and long pauses. So just from a practical point of view, having the entire game on one CD was a massive time-saver. But the Amiga CD32 version heralded another big improvement in that voice acting was added throughout.

Revolution initially hired actors from The Royal Shakespeare Company to record the 5,000 lines of dialogue over two days. But it wasn't happy with the results, and realised that it needed to hire specialist voiceover artists. So the script was rerecorded and the results are impressive, if a little strange. Although the game is set in Australia, most characters have British or American accents, and some spoken lines don't match exactly with the written version. As an early example of the possibilities of the immense storage offered by CDs over floppy disks, *Beneath A Steel Sky* shines.

» [CD32] Not having to swap through 15 floppy disks makes this cyberpunk classic at lot more appealing to play.

» [CD32] You can't hear it, of course, but *Beneath A Steel Sky* is a superior cut on the CD32 console thanks to its new soundtrack.

RETRO SUNKER

» LITIL DIVIL

■ GREMLIN GRAPHICS ■ 1993

■ Its fancy cartoon graphics were eye-catching, But the gameplay is tedious and frustrating, a mix of dull side-scrolling sections and even duller 3D mazes.

» PIRATES! GOLD

■ DEVELOPER: **MICROPROSE**
■ YEAR: **1994**

■ Before *Sea of Thieves*, there was *Pirates!* from Sid Meier. And slightly after *Pirates!* (bear with us) there was *Pirates! Gold*, which tarted up the original game. As well as the flashy intro, *Pirates! Gold* featured improved graphics and gameplay, and the CD32 version had the edge over other ports thanks to its CD-quality audio. It's not the definitive version of the game, but it was certainly the best available at the time of its 1994 release

» GUNSHIP 2000

■ DEVELOPER: **MICROPROSE**
■ YEAR: **1994**

■ This flight sim ran much faster and looked prettier on the CD32 in comparison with the bog-standard Amiga version, and also added the voice of a copilot to warn you about upcoming dangers. And of course, it came with the obligatory fancy intro, a rite of passage for all CD32 ports. Also, it had menus that were disguised as office scenes, a favourite trick of Nineties flight sims that we find oddly charming.

» GLOOM

■ DEVELOPER: **BLACK MAGIC**
■ YEAR: **1995**

■ Ah, the age of the *Doom* clone! The arrival of id Software's masterpiece on PC made those beige business machines cool, and developers scrambled to imitate the game's gory gunplay. And none was a more slavish imitation than *Gloom*. Derivative though it may be, *Gloom* played a mean game of 3D violence, and the CD32 version ran smoothly in fullscreen mode, unlike versions on the less-powerful Amigas.

» ALIEN BREED: TOWER ASSAULT

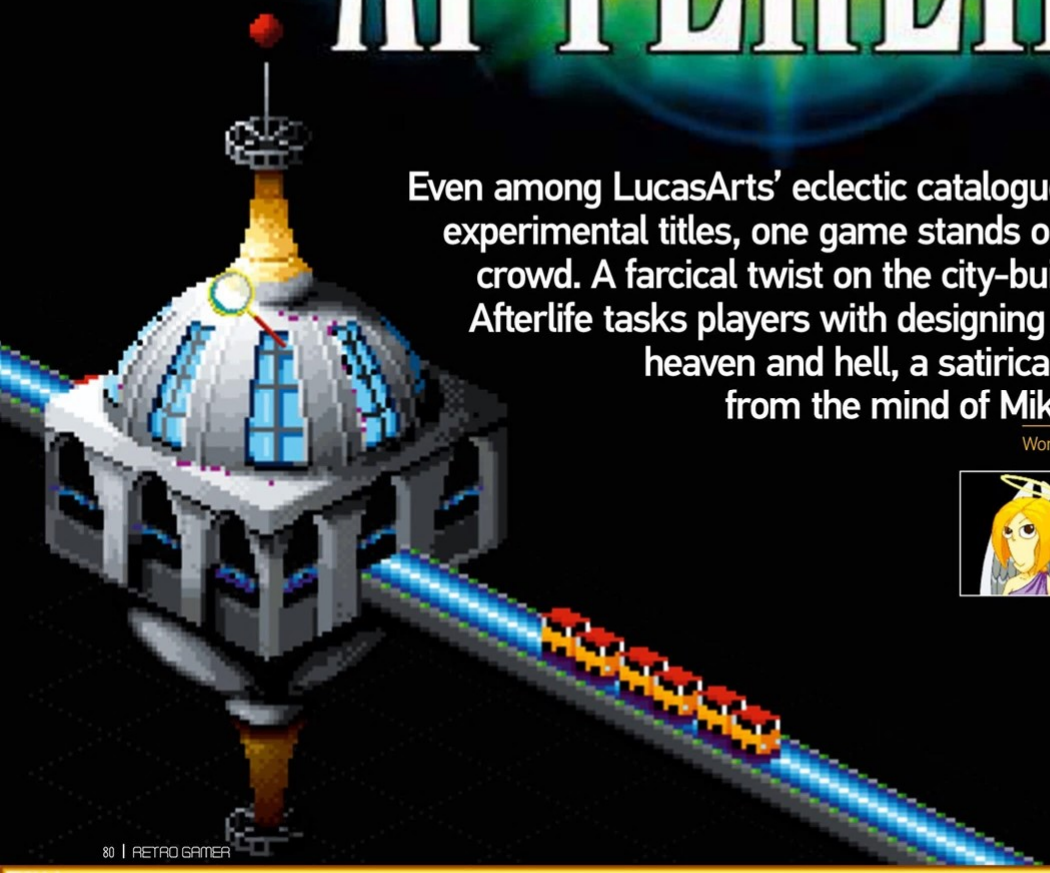
■ DEVELOPER: **TEAM17**
■ YEAR: **1994**

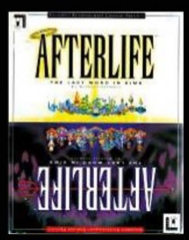
■ Team17 and Superfrog were good to the CD32, they ported the third game in the excellent *Alien Breed* series to the ill-fated machine, and threw in a free copy of *Alien Breed II*. Not only that, *Tower Assault* features the flashy intro so common in CD32 ports, and this one is a beauty. Shot in the Team17 building in Wakefield, it's packed with flashy effects and stars Team17 staff members.

THE MAKING OF AFTERLIFE

Even among LucasArts' eclectic catalogue of daring, experimental titles, one game stands out from the crowd. A farcical twist on the city-builder genre, Afterlife tasks players with designing the perfect heaven and hell, a satirical god game from the mind of Mike Stemmle

Words by Hareth Al Bustani





IN THE KNOW

- **DEVELOPER:** LUCASARTS
- **PUBLISHER:** IN-HOUSE
- **RELEASED:** 1996
- **PLATFORM:** PC, MAC, LINUX
- **GENRE:** SIMULATION

> **"To its credit, LucasArts was a rather experimental studio at the time"**
> Mike Stemmle

The life of a demiurge is quite a complicated one. After many failed attempts, you have finally designed an afterlife in perfect harmony, welcoming sinners and saints to a world of untethered delight, or one of abject suffering. A thousand years, many deaths and a few bank loans later, your afterlife has become a well-oiled machine; a highly sophisticated network of karmic vehicles, punishments, rewards, supernatural training facilities and so much more.

To keep costs down, you have opted to train your own angels and demons. However, even with the ongoing plague down in the mortal world, their numbers have grown too strong. While you're busy preparing to ship in the next batch of SOULs, the out-of-work angels and demons suddenly declare war on one another. Heaven and hell are rocked by explosions. Before you know it, your afterlife is haemorrhaging SOULs and, more importantly, money. Enter the Four Surfers Of the Apocalypso, summoned to lay waste to what remains of your unsuccessful enterprise. You're fired. Back into the void you go.

Right off the bat, it is clear that *Afterlife* is not a typical city-builder. Part-god game, part-simulator and part-social commentary, the title oozes farce, wit and satire at every turn. It is outlandish, even by LucasArts' standards, and very much the twisted brain child of designer, Mike Stemmle.

"The idea for *Afterlife* had been kicking around in the back of my head ever since I played *SimCity* for the first time," says Mike. "Although, it's probably fair to say that the concept of an 'organised' afterlife has tickled my creative bone ever since I'd read *Dante's Inferno*."

While he reserved particular adoration for *SimCity 3000*, Mike felt the simulator genre had never quite fulfilled its potential. "When it came to the disasters, I always thought it was a shame that most sim games were unfortunately too restrained by the 'reality' of their sim to go whole-hog goofy. *SimCity* added an alien invasion, but they really didn't get any sillier than that. Fortunately, *Afterlife* was under no real-world constraints, allowing me to indulge all of my worst pun instincts."

While Mike's concept for *Afterlife* was far from conventional, hot on the heels of his work on *Indiana Jones And The Fate Of Atlantis* and *Sam & Max: Hit The Road*, he had no trouble getting it greenlit. "To its credit, LucasArts was a rather experimental studio at the time," he reflects, "and allowed me to launch the project based on little more than a five-page outline and a lean budget."

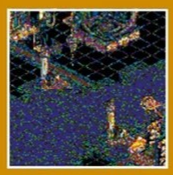
Mike ran a tight ship; a modest team, with ten to 20 people working on the game at any given moment. "I was pretty deeply involved at all times. It's probably the last game that I did any serious 'real' programming for, much to my programmers' chagrin."

Gamers play a demiurge, a local deity appointed by the Powers That Be to create a balanced system of eternal rewards and punishments for sinners and saints. Despite the weighty premise, every step of the journey is accompanied by a dose of Mike's distinct brand of satirical humour – one he attributes to "a steady diet" of *Mad Magazine*, *Cracked*, *National Lampoon* and *Spy*.

"Satirising religion itself requires a deft touch that even my arrogant 20-something self knew was beyond his skills. I was primarily intent on using the trappings of a very Christian afterlife ▶

EXCEL IN THE AFTERLIFE

Helpful hints to make it big in heaven or hell



TAKE IT SLOW

■ It is difficult to start turning a profit in *Afterlife*. The key is to take your time, and only zone as many rewards as punishments, and build as many buildings as you need. Especially in the early stages, keep overheads to a minimum, and remain as efficient as possible.

BALANCE

■ While heaven prefers diversity for its residents, favouring mixed zoning blocks, hell's residents deserve to be bored – making large, monochrome blocks more preferable. Micromanaging your structures mid-game will pay dividends in the long term.

ANGELS AND DEMONS

■ Initially all your angels and demons are imported. You can cower your overheads by building training centres. However: make sure at least a tenth of your workers are imported; too many homegrown workers leads to idleness, riots and war.

LISTEN TO YOUR GUIDES

■ While Jasper and Aria always seem to have a long list of gripes, it is well worth heeding them. Whether its traffic efficiency or labour management, take the time to understand the mechanics of the problems they have outlined.

FORWARD PLAN

■ Introduce an influential EMBO to affect technological and spiritual development. If you only want to build a hell, for example, boost the number of OPRAists – who only believe in hell. In addition, spreading lust will boost the planet's population, mostly destined for hell.

GOOD VIBRATIONS

■ Buildings generate good or bad vibes. While gates and karma stations put out the wrong variety of vibes in each domain, 'topias' and gift structures are good sources of bad vibes in hell and good vibes in heaven.

BANKING

■ Income is based on total SOULs, multiplied by the SOUL rate. While heavenly loans require payments with interest, banks in hell only require the money be repaid within 100 years. This can be abused by running a Ponzi scheme, taking new loans to pay off older ones.

KARMA POLICE

■ SUMAists believe they will visit both fate zones. In heaven, they consider blue tiles the most important, and green the least, so blue tiles should be placed closest to the gates. In hell, residents should have to suffer longer walks; so place the blue tiles furthest from your gates.

» [PC] Every once in a while, disaster strikes the planet of the EMBOs, sending a generous batch of SOULs your way.

to take some good jabs at people and things that bothered me at the time," he explains.

Despite shining a harsh light on the more absurd aspects of the human condition, the game avoids becoming mired in negativity – aided by a broad, 'humanist' score from Peter McConnell. It goes to great lengths to explain that, though Earth-like, the planet is not Earth, and the creatures which inhabit it worship a wide range of fictional religions. These beings are EMBOs, or Ethically Mature Biological Organisms, who each have a SOUL, or Stuff Of Unending Life. Some believe only in heaven, others in hell; some believe in reincarnation, others in no afterlife at all.

The demiurge begins with a pair of empty planes. First, they must build gates, to allow SOULs to enter, before constructing a network of roads. Keeping an eye on the planet of the EMBOs, they generate an appropriate balance of punishments and rewards by drawing zones for each of the seven sins and virtues: Envy, Avarice, Gluttony, Sloth, Lust, Wrath and Pride in hell, and Contentment, Charity, Temperance, Diligence, Chastity, Peacefulness and Humility in heaven. Training centres, convert SOULs into angels and demons, to help run things on the ground.

"As you might imagine, hell is a heck of a lot easier to design, because ironic punishments are a dime a dozen," says Mike. "That said, I think I enjoyed designing heaven more, both because it was more difficult and because it didn't make me feel like I was wolfing down karmic junk food." Reward and punishment tiles spawn beautiful pixel art structures, where "we pretty much allowed our artists to cut loose". "Frankly, I'm a little disturbed to think about what their visual influences were."

» [PC] Cheat too much and a familiar space station will arrive to obliterate your world.

Kevin Evans, also a *SimCity* aficionado, was responsible for some of the artwork in hell, drawing upon the nightmarish works of HP Lovecraft, Clive Barker, Francis Bacon, Stanisław Szukalski, HR Giger and Zdzislaw Beksinski. The game, he believes, was the perfect example of "what LucasArts did best when management trusted its developers to do what they do best". After 25 years in the industry, *Afterlife* remains one of his fondest experiences.

Meanwhile, Chris Hockabout, who joined the project's art team after completing Hal Barwood's *Big Sky Trooper* for SNES, thought it sounded hilarious. "I'd be given a simple direction, like to design 'an angel city that plays off of the old saying: how many angels can you fit on the head of a pin?' So, basically, a fanciful city that's built on the head of a pin. I'd do some concept sketches, find which ones the leads liked the most and then draw them in Photoshop," he recalls.

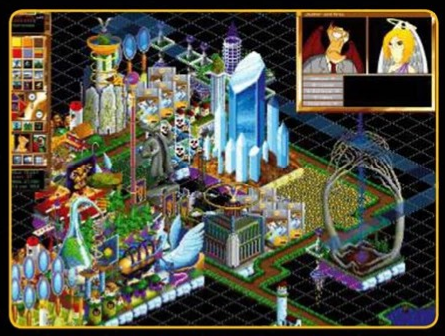
While Chris would have liked to have seen a terrain system in hell, and Dantean tiers, the deceptively simple game boasts mind-boggling depth. SOULs who are ready to reincarnate, for example, need a karma station anchor, connected with roads and karma tracks, to transport them out of the afterlife. They travel in karma vehicles, via portals, which hover between the two realms.

"We had a ludicrously complicated system for tracking how the planet of the EMBOs evolved, based on the feedback loop created by the reincarnating EMBOs. It's like a little sim game buried within the sim, so you can sim while you sim," explains Mike. "The hardest thing, as I recall, was to keep the game updating with a proper rhythm, as the populations increased from hundreds to hundreds of billions."

Players are given a wide array of graphs and interfaces with which to micromanage the various aspects of their afterlife. Fortunately, the game pairs its steep learning curve with a hearty helping of humour. The demiurge is assisted by two on-screen characters, Jasper Wormsworth and Aria Goodhalo, a demon and angel with conflicting natures. Having just finished up work on *The Dig*, Graham Annable was brought in to lead the Jasper and Aria character animations. "It was completely unlike any of the other projects at the company at that time," says Graham. The toughest part, he adds, was staying true to the concept art.

"In my efforts to keep the characters looking like the concepts, I remember a lot of sweating over the mouth positions for them. It was a tricky dance to make sure the faces were emoting the desired vibe, while still keeping them on model. Jasper and Aria were unusual designs to say the least."

Beyond Jasper and Aria, players can focus on specific SOULs, and read their backstories. These soar to Pythonesque, surrealist heights; T'klak'takliaktu, who is being punished for



» [PC] The ideal heaven will boast a diverse population of virtuous SOULs, tended to by both homegrown and imported angels.

THE SEVEN DEADLY SINS

Afterlife delivers a grisly array of dark punishments

SLOTH
CONVENTION OF THE DAMNED

■ There is nothing worse than a dreary convention, and this is the dreariest of them all, complete with mandatory hot coal step aerobics, and workshops such as 'Making The Most Of Your Downtime While Being Disembowelled'.

GLUTTONY
THE BOWELS OF HELL

■ A rather grisly fate awaits gluttons. SOULs are sewn into the digestive tract of an archdemon, notorious for bad, spicy diets, feeding tubes stuffed into their gobs, with the other end placed into their neighbouring SOUL's digestive tract.

PRIDE
THE ZOO

■ Proud souls find their sin on suitably proud display at the zoo. Here, they are stuffed into cages and tormented, teased, prodded, fed raw meat and humiliated for the amusement of irritating bystanders.

ENVY
ESCHER PITS

■ Envious souls are trapped in this network of torture chambers – with each SOUL enduring their own unique punishment. Assuming they are suffering more than their neighbours, the envious sinners can switch places.

> **"It was completely unlike any of the other projects at the company"**
> Mike Stemmle

gluttony, simply displays his dating profile, outlining his stinginess, high libido and hatred for drag racing. Klak'taklun'rk, on the other hand, committed the sin of wrath; her habit of giving generously to charity outweighed by taking credit for other people's work. The game's pause menu, meanwhile, brings up throwaway lines like "Game pause, dog paws, we all pause, for game pause."

When the demiurge essentially loses too much money, a *SimCity*-style disaster is triggered, where the Four Surfers Of The Apocalypso sweep in to destroy the entire afterlife. If gamers use cheat codes three times, they are punished by the arrival of a Death Star, hovering over hell, and sporadically destroying buildings.

Although *Afterlife* enjoyed some critical success, Mike says it was a 'commercial dud', and "even at their most experimental, LucasArts was interested in making a buck". He adds: "LucasArts almost clawed back some of my *Sam & Max* royalties on account of its dudness."

The game's main shortcoming, he concedes, was that it was too niche. "Building games to amuse oneself is a great way to create capital-A art, but it's a lousy way to capture a large-scale audience." He did, however, sufficiently rile up one "confused young man" enough to send in a "vaguely threatening letter". He continues: "But we get vaguely threatening letters when we change Max's voice actors, so that's kind of par for the course. In the end, I think *Afterlife* was too silly to get anyone's knickers in a twist – which is what we were going for all along."

» [PC] If the Four Surfers Of The Apocalypso show up, it means you're absolutely awful with money.

Though Mike has few regrets, two in particular do spring to mind. "Originally, every tile in the game was supposed to get a beautiful portrait of its reward or punishment, not just a few. I wish we could have had the budget for that. Also, in hindsight, we really should have programmed the silly thing in C++."

Zoning a 7x7 grid in a certain manner unlocks the Mother Shak building, an Easter egg with a message outlining Mike's views on purpose. Looking back, he reflects: "When I designed *Afterlife* I was still a Roman Catholic, conflating my love of a good story with evidence of a divine creator. In the years since, I have transitioned to full-blown atheism. I still love a good story, and believe that the stories we tell can shape the world – but I recognise that they are, in the end, only stories. For the moment, my interest in the spiritual is at a low-ebb. I'm much more interested in the cosmic at this juncture in my life." ✱

LUST
ROBOTO
■ Here, lustful souls, addicted to the pleasures of the flesh, are trapped inside robotic bodies, unable to hear or feel anything. A sensory deprivation tank on legs, they must roam a city of similarly trapped hedonists.

WROTH
ILLUMINATILAND
■ Though it resembles heaven, residents of Illuminatiland soon begin to grow paranoid, increasingly spotting patterns and conspiracies – which fall upon deaf ears. After being kidnapped by Men In Black, they descend into madness.

AVARICE
SHOCK MARKET
■ Here, stockbrokers attempt to amass enough riches to buy their way out of hell. It always ends the same way, with them hurling themselves off the 58th floor of Shock Market Towers – only to survive, and repeat the process all over again.

DEVELOPER HIGHLIGHTS

THE SECRET OF MONKEY ISLAND (PICTURED)
SYSTEM: VARIOUS
YEAR: 1990

INDIANA JONES AND THE FATE OF ATLANTIS
SYSTEM: VARIOUS
YEAR: 1992

SAM & MAX: HIT THE ROAD
SYSTEM: VARIOUS
YEAR: 1993

THE MAKING OF

TENCHU

STEALTH ASSASSINS

It's been 21 years since developer Acquire blended stealth and the supernatural in a deluge of blood and steel. With From Software's Sekiro: Shadows Die Twice looking to evoke the spirit of Tenchu, Retro Gamer jumps niftily backwards to the very first game in this legendary and much-loved series

Words by Graeme Mason

Stealth became a serious sub-branch of the third-person action adventure in 1998. Emerging from a dark corner came a shadowy trio of games: *Metal Gear Solid*, *Thief: The Dark Project* and *Tenchu: Stealth Assassins*, the latter a tale of two ninjas in feudal Japan. As with stealth, ninjas had been presented differently prior to *Tenchu*. Famous examples include Joe Musashi, aka Shinobi, and Armakuni from System 3's *The Last Ninja*, neither of whom worry about brazenly striding around their respective worlds and eliminating enemies face-to-face. *Tenchu* would revolutionise this, rewarding the player for a sneaky, undetected approach.

The idea of *Tenchu* began in Tokyo with a man named Takuma Endo. "I had been developing games since I was at university and went freelance after I graduated," he tells us. "I started my own business, just about when the PlayStation launched. I wanted to develop a PlayStation game!" Endo's company, Acquire Corp, founded in 1994, took part in a competition run by Sony Music Entertainment. "We won, and got the right to produce a project, but couldn't think of the right one. Then, after struggling for six months, we came up with the ninja concept." The idea was placed into a demo featuring motion-captured characters and a science fiction-style backdrop.

» [PlayStation] Rikimaru deftly liberates a guard's head. We don't want to get on the bad side of this guy, that's for sure.

IN THE KNOW

» **PUBLISHER:** SONY MUSIC ENTERTAINMENT/ ACTIVISION

» **DEVELOPER:** ACQUIRE CORP

» **RELEASED:** 1998

» **PLATFORM:** PLAYSTATION

» **GENRE:** THIRD-PERSON STEALTH

The demo demonstrates how different *Tenchu* could have been before Acquire decided to use a more authentic scenario, and once development began on *Tenchu*, the chief concepts of honour and revenge came into play. "The word 'tenchu' means to attack against the person who did the wrongdoing, and is often used in samurai drama," says Endo. "Then we looked into Japanese folklore to help us create images of demons and hell." While most of the opponents in *Tenchu* are of human origin, there are also supernatural beings to combat. Emaciated fire-breathing cultists, axe-wielding giants and recurring villain Onikage all offer challenges beyond the realm of normality.

Tenchu is the story of Rikimaru and Ayame of the Azuma ninja clan in the service of Lord Gohda. Their roles are to infiltrate those who have become corrupt or greedy, and as the game proceeds, the pair are drawn more often towards the demonic Lord Mei-Oh and his unearthly warrior, Onikage. Eventually, Gohda's castle itself is ransacked and his daughter, Princess Kiku kidnapped by Onikage,

Live by Honor. Kill by Stealth.

The Definitive Tenchu

leaving the Azuma no choice but to confront Lord Mei-Oh. Fortunately Rikimaru and Ayame have a range of traditional and fantastical items to help them. The former include caltrops for deterring pursuers, rice paper for route-marking and poisoned rice, alongside esoteric items such as an animal horn – which instantly pacifies nearby alerted foes – proving most useful to a ninja who wishes to remain undiscovered.

With Sony planning to release *Tenchu* only in Japan, the game's development caught the eye of an American publisher keen to produce titles on the increasingly popular PlayStation console. Working at Activision was producer David Grijns. "I was in New York City in 1996 when I saw an ad for a job in market research for a small company that had gone bankrupt a few years earlier. They called me, and I flew to Los Angeles, and a few weeks later got offered the job." David's initial role didn't last long. "I convinced the management team to fly me to Tokyo to look for PlayStation titles and the rest begins with *Tenchu*."

David spotted a small preview in Japanese games magazine *Famitsu*, and was instantly intrigued. "We contacted Sony and discovered they had no plans to release the game outside of Japan. At the time, they were shopping the rights to another PlayStation title, but I said, 'No, no. I want *Tenchu*!" Bill Swartz, boss of Activision Japan, negotiated the rights to publish *Tenchu* in other territories, with Larry Galka acting as producer in the US and Masami Yamamoto producer in Japan. Yet despite David's enthusiasm, it was a big step in the dark. "*Tenchu* was a relatively big risk from the standpoint of introducing gameplay that no one had ever seen before," he recalls. "And technically, it stood at the dawn of full 3D games made possible by PlayStation. It was also a full-on stealth game that happened to be set in feudal Japan and had absolutely nothing to do with the western

» [PlayStation] Ayame dispatches a foe with her dual wakizashi blades. Hang on: aren't ninjas supposed to leave no trace?

perception of ninjas as superheroes." While this was the reason for Sony's reticence to release *Tenchu* outside Japan, Activision loved how the game unapologetically represented ninja as they actually were – pure stealth killers, better off striking from darkness than in a straight fight.

Meanwhile, back in Japan, Endo and his team were under pressure, not helped by the abrupt change of setting. "We didn't have so much time to study when we decided to convert the style," he notes. "So knew we had to make the game based on something we already knew." The Acquire founder himself took on a multitude of roles as the developer worked overtime on *Tenchu*. "My role was director, planner, writer, sound editor and so on, and I also did game tuning. There were no designers at the time; we made it together." There were several vital tenets that the team insisted should remain. A male or female ninja could be selected, each presenting the story from a slightly different perspective, and each armed with a grappling hook. While authenticity was a plus for Acquire, the truth may have been – ahem – stretched a bit with this ▶

The stealth classic saw a couple of revisions and expansions over the years

ORIGINAL JAPANESE RELEASE

■ This version, released by Sony, includes eight levels and only one enemy layout per level. Each boss character is subtly different, and there is a slightly more refined combat system. Also, as per all the Japanese iterations of *Tenchu*, the decapitations are removed.

TENCHU: SHINOBI GAISEN

■ Released in Japan a year later, this version updates the original Japanese release with much that was included in the western game. So in came the extra missions (Cross The Checkpoint and Execute The Corrupt Minister) and layouts, as well as a mission editor that hugely increased the overall value of the package.

TENCHU: SHINOBI HYAKUSEN

■ After the success of *Gaisen*'s level editor, Acquire organised a competition in order to assemble an elite collection of user-generated missions. The resulting expansion contains over 100 levels, which while unconnected by an overall storyline, offer bonus features as a reward for completion.

From The Shadows

Key characters in Aquire's stealth adventure

RIKIMARU

■ Rikimaru is an agile fellow – as you'd expect for a ninja. He can perform a useful power jump, some fleet-footed dodging and sports a narrow rectangular sword, or ninjaken, that can be used for three different kill moves. These moves, each of which results in a cinematic, vary according to which direction the ninja is facing at the moment of attack. Of the two heroes of *Tenchu*, Rikimaru is the strongest and has more health.

AYAME

■ It's easy for enemies to underestimate this waifish ninja. Packing three different kill moves to Rikimaru, Ayame moves quicker than her comrade, although the trade-off is her relative weakness and reduced health. Instead of the ninjaken, Ayame sports a dual set of razor-sharp swords known as wakizashi. Both she and Rikimaru come equipped with a grappling hook to traverse rooftops.

ONIKAGE

■ Onikage is the brutal enforcer of the evil Lord Mei-oh. Originally an honourable ninja, his continual undead resurrection by Mei-oh has resulted in a perverse and corrupt disposition, as he constantly torments and baits his opponents before delivering a fatal blow with flying kicks. Utilising a cheat mode, Onikage can be unlocked as a playable character in *Tenchu*.

DEVELOPER HIGHLIGHTS

GAME: TENCHU 2: BIRTH OF THE STEALTH ASSASSINS (PICTURED)
SYSTEM: PLAYSTATION
YEAR: 2000

GAME: WAY OF THE SAMURAI
SYSTEM: PLAYSTATION 2
YEAR: 2002

GAME: OCTOPATH TRAVELLER
SYSTEM: SWITCH
YEAR: 2018

useful item. Ground level situation getting a little hot? Then take to the sky with the grappling hook – but did ninjas really use them? "Yes, they did," nods Endo. "Although while the hook that ninjas used is somewhat similar, it doesn't stretch out like a rubber band as it does in the game." The free-flowing nature of the hook, and the ability to use it anywhere was a function that the developer struggled to implement in *Tenchu*, but they persevered, buoyed by how cool and helpful the mechanic was.

Another challenge faced by the team was the draw distance that the PlayStation could realistically handle. Recalls David, "It was a new platform at that time and everything was new in terms of 3D asset development and engine architecture. For a stealth game in which a ninja like Rikimaru needs to be able to spot enemies from a long distance, there was always a trade-off between engine performance, framerate and gameplay." Given the nature of the game, setting the whole story at night seemed a logical decision. "Computer specs at the time were not high enough to show a number of objects under daylight, and yes, the night setting suited the image of ninja," Endo adds.

The team achieved a look that perfectly showcased the abilities of both the PlayStation and the developers. "In the end, I think Acquire found a good balance," says David. "The game looks dated today, but in 1998, it was beautiful and looked like nothing else on the market." Takuma Endo, at the business end of wrestling with the game's engine, feels more pained upon recalling these issues. "We had some severe graphics problems, such as framerates dropping when a number of enemies appear on-screen. We had to arrange enemies at the right places to avoid it. It was also challenging to include five languages on a CD-ROM, with each one containing 40 minutes of voice acting data."

And *Tenchu* didn't just look different; it played different, too. Each level varies in objective, from crossing a checkpoint to locating a rare medicinal flower. It's possible, if hazardous, to stride through each mission, taking on enemies face-to-face. But a safer and more rewarding method is to sneak around walls and roofs butchering enemies silently using a combination of the ninja's Ki meter and a selection of bloody kill moves. "The Ki meter works simply by distance, and was my idea to represent the skill of a ninja, the ability to detect danger," explains Endo. "I thought giving all the information within a minimap would make the game unrealistic." Rikimaru and Ayame must trust their senses if they are to remain undetected – sight, sound and the Ki meter are essential.

» [PlayStation] The Manji Cult's decor doesn't exactly scream, 'We're nice people, honest!'

LORD GOHDA

■ A wise and generous leader of his domain, Lord Gohda is nonetheless not someone you'd want to double-cross thanks to his pair of lethal ninja enforcers, Rikimaru and Ayame. A notable warrior in his own right, Gohda is an expert swordsman who favours the traditional katana in combat, and must ward off all threats to his country from those who envy its peace and prosperity.

LORD MEI-OH

■ Translating loosely as 'Pluto', the god of the underworld in classic mythology, Lord Mei-oh is the sworn enemy of Lord Gohda, and the ninja's final opponent having dispatched his henchman, Onikage. Boasting huge magical properties, Mei-oh can teleport a short distance and also project devastating fire attacks. Despite these powers, *Tenchu* proves to be the end of the road for Mei-oh. Or does it?

» [PlayStation] At the start of Cross The Checkpoint awaits this warrior.

"People's jaws would drop seeing Rikimaru and Ayame brutally take down samurai"

David Grijns

This 'Spidey sense' became a core ingredient of *Tenchu* along with its gory and exaggerated death moves. "The stealth kills sold the game so there was always a push to add more but I think the enormous replayability of the game showed that the game's depth was surprising even without more stealth kills," David says. "It's hard to believe now but in 1998, sitting in conference rooms at Activision, people's jaws would drop seeing Rikimaru and Ayame brutally take down samurai in a variety of stealthy ways."

Tenchu was released in February 1998 in Japan with the western versions following a few months later. After briefly considering a Nintendo 64 port, it was decided to keep the game PlayStation exclusive, with the American/European versions including an extra two levels and multiple layouts for each mission. Activision's gamble paid off. "It was our best-selling game in 1998 and a huge boost to company profits at a time when we were still struggling to earn market share," remembers David, who estimates the game shifted over 5 million copies including re-releases. And strangely, 21 years later, *Tenchu* stands almost alone in its unique genre. "Outside of *Thief*, *Splinter Cell*, and *Metal Gear*, pure stealth games are few and far between. And yet *Tenchu* was somehow different than all these games. It was very deliberate and unapologetic in its depiction of 16th century Japan. It refused to show ninja as anything other than what they were – shadows. Born in darkness and destined to die in the darkness."

Back in issue 127 of **Retro Gamer**, our readers, to the surprise of many, voted *Tenchu* number four in the Top 25 PlayStation Games feature. What does Endo think makes the original game so enduring? "I think the idea of *Tenchu*, to become a ninja and wander around freely, was relatively new at the time – you can see its influence today in many games," he muses. "To say the least, we made this game with the greatest effort and all our creativity. Sadly, *Tenchu* has been forgotten in Japan, but I am very happy that it is highly evaluated in the west."

For David Grijns, at the start of his videogame development career, his first game demonstrated the sort of company he was working for, in addition to influencing heavily his own career. "I was young and somewhat naive, and pushed for things that could have ended my career. To their great credit, the management team at Activision was a rare beast – they didn't want to hear what they already knew – they wanted people to challenge them and defy the common wisdom. It was in that spirit that *Tenchu* came to be, and it has informed virtually everything I've done in this business since."

It's hard to deny *Tenchu*'s appeal, both as a pioneer of the stealth game, and as a unflinching window into the way of the ninja. Today, the series lives on in FromSoftware's spiritual successor *Sekiro: Shadows Die Twice*, which like *Tenchu* is published by Activision and actually started development as a *Tenchu* game. We feel that's fitting, knowing the series is still there, behind the scenes, operating from the shadows. ✱

Tenchu Trivia

We stealthed our way behind guards to unearth this forbidden knowledge

- Contrary to the game, ninjas rarely used weapons, although they often hid shuriken, makibishi (caltrops) and swords under their clothes.
- Acquire's plan was always to have Rikimaru dramatically survive in order to continue the series.
- According to David Grijns, *Metal Gear Solid* publisher Konami tried hard to publish *Tenchu* outside Japan, possibly in order to avoid a direct competitor to its own PlayStation stealth title.
- The only adjustment for the UK release was the requirement to replace shurikens with razor-sharp darts. Phew, much safer.
- *Tenchu 2* entered development immediately following the success of the first game. In David's opinion, it is the strongest game of the series from a narrative standpoint.
- *Tenchu*'s original sci-fi demo featured motion-captured movie stars Sho Kusagi and his son, Kane. The stealth aspect was downplayed, although certain key elements, such as lurking around corners and taking down oblivious enemies were present.
- The final, authoritative pose for each ninja after performing one of the takedown moves comes from sword-fighting scenes in traditional Japanese samurai drama.
- Due for imminent release, FromSoftware and Activision's *Sekiro: Shadows Die Twice* has been touted as the spiritual update that the *Tenchu* series finally deserves. We await it with bated breath.

» [PS2] This iteration of the character is a far cry from the floaty design seen in the Mega Drive originals.

VECTORMAN

Producer Cord Smith explains what went wrong with the attempted PlayStation 2 reboot of a cult Mega Drive favourite

IN THE KNOW

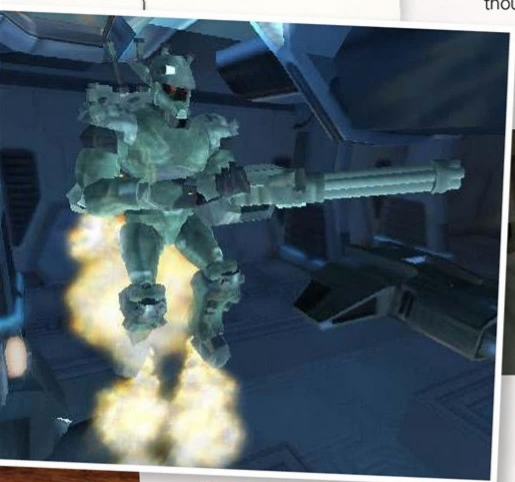
» **PUBLISHER:** SEGA

» **DEVELOPER:** PSEUDO INTERACTIVE

» **SYSTEM:** PLAYSTATION 2

» **DUE FOR RELEASE:** 2004

We feel that Pixar's *Wall-E* owes *Vectorman* something of a nod. On the Mega Drive, Sega's bouncy robotic hero was cleaning up Earth a decade before Pixar's lovable hero. Five years before *Wall-E*, though, an attempted *Vectorman* PlayStation 2 reboot in the early Noughties didn't go as planned for developer Pseudo Interactive.



» [PS2] Is that *Halo*, or a cynical corporate-driven rip-off? It's the latter, unfortunately.

» [PS2] Though *Halo* was a clear inspiration, *Vectorman* was to utilise a third-person perspective.

Fresh from the cel-shaded mayhem of Xbox title *Cel Damage*, the 20-person team at Pseudo began pitching seed demos. With its physics engine at work, Pseudo's early work on a rebooted *Vectorman* impressed executives at Sega, enough to greenlight a prototype. "It hearkened back far more to the original at that time. That's what got Sega's attention. They were like 'wow, this has merit'. It's a passion project for [Pseudo]," says producer Cord Smith.

With the approval from the publisher, *Vectorman* started coming to life. "At the beginning, since it's our generation that knows *Vectorman*, it was simply 'if it ain't broke don't fix it'," says concept artist Ted Kim. "There was a lot more of the Cel Damage DNA in terms of the lightheartedness," remembers art director Gary Snyder.

The *Vectorman* prototype retained the established environmental theme, with a plan to stretch the story beyond Earth in a fully 3D environment. Also, the character sported the floating orb design that was seen in the original Mega Drive iteration, and he even danced along with the soundtrack's beat. The reboot's design focus was on collectibles and platforming with light shooting, the three hallmarks of the Mega Drive originals.

Development continued on this path for three to four months. Sega then switched producers. That led to a group focus test of Pseudo's work to that point. It didn't go well. "The majority of the younger target demographic, because they had no knowledge of the IP, could not wrap their head around why a robot would be made of floating balls. The aesthetic confused the hell out of them," says Cord.

That focus test sealed *Vectorman*'s fate, but not immediately. With test results in hand, Sega's producers began asking for changes around New Year period of 2002. "That producer,

OR YOU COULD PLAY...

VECTORMAN
1995, BLUESKY SOFTWARE

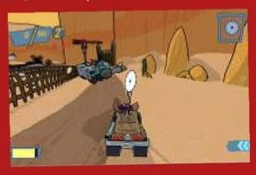
■ Both of the original games from Blue Sky Software hold up today, with their quirky tone and hyperactive pace. As with Psuedo Interactive's original concept for the reboot, the focus is on collecting and shooting on an Earth ravaged by pollution.

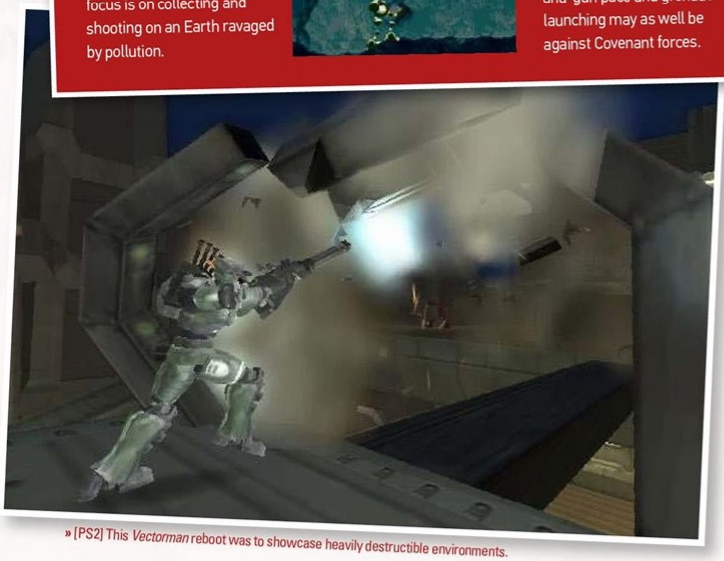
HALO: COMBAT EVOLVED
2001, BUNGIE

■ Watching the E3 demo of *Vectorman*, it looks indiscernible from Bungie's own masterwork, outside of a change from a first-person perspective to third-person. The run-and-gun pace and grenade launching may as well be against Covenant forces.

CEL DAMAGE
2001, PSEUDO INTERACTIVE

■ Launched alongside the Xbox (and later ported to other consoles), Pseudo's flair is clear to see in this frenzied cartoon car combat entry. With delightful animation, the squash and stretch style suggests what *Vectorman* almost was.





» [PS2] This *Vectorman* reboot was to showcase heavily destructible environments.

> "He was like what's hot right now? Oh Halo is hot. Oh, SOCOM is hot"

he was like, 'What's hot right now? Oh *Halo* is hot. Oh, *SOCOM* is hot. Let's combine it,'" says Ted. *Vectorman*'s design was shifted to become a *Halo* rip-off, even down to a female companion similar to Cortana.

At that time, coming soon after the Dreamcast's fall, Sega's limited resources defined the now third-party publisher. A risk on an older IP that a younger generation didn't identify with wasn't worth a risk. "Sega didn't have the power to really push out first-party titles they felt were different and weird," says Cord.

Development on *Vectorman* continued for another three to four months, all the *Halo*-like changes in mind. Asked to recall this time on the project, Ted replies, "I've never done so much work for a project that I wasn't proud of or didn't like or didn't want to look at it."

At E3 2003, the work from inside Pseudo was shown to the public. In the short demo, *Vectorman* holds an assault rifle, throwing enemies when he gets close, and walking through corridors not entirely different in aesthetic appeal from *Halo*'s Library stage. Gone were the floating orbs that defined the character. Walls could break and boxes were strewn about, but the attitude of the original character was clearly gone.

"There was certainly a bit of friction between people who were purists. I

» [PS2] The developers lament that much of their original design was scrapped by Sega.

» [PS2] In truth, the only thing the reboot has in comparison to the originals is the name.

was part of that. I was always torn," says Cord. The E3 trailer was Cord's own doing, from the gameplay to the music. "It's pretty embarrassing for me to look back and go man, we thought that was really cool at the time but it doesn't hold up."

Not long after the E3 debut, Sega made the call to cancel *Vectorman* after eight months. According to Cord, it was Sega's move to transform the project that killed this reboot. "Sega was having its own turmoil and shifting of the guard. [Sega] came back and criticised their own decision of moving it away from *Vectorman*. Ultimately, Sega had pushed it to change so much and then realized it wasn't the IP anymore."

Pseudo did keep a working relationship with Sega. The developer paired with the team for two games in the *Full Auto* franchise, highlighting a destruction engine that was once the heart of *Vectorman*. Pseudo closed in 2008 after a project with Eidos fell through.

After two games on the Mega Drive, *Vectorman* was silenced for good, save for a few appearances on compilations. Like development of the PlayStation 2 version, his life was short. Were it Gary's decision, this wouldn't be the end of the character though. "I look back on some of the images and think, 'This is still relevant, there's still a story to be told here, and there's still a place for *Vectorman* in this day and age.'" ✱

» [PS2] Look a beam sword! Now where have we seen one of those before…

REBECCA HEINEMAN

Her four decades in the games business have seen Rebecca Heineman go through big changes both on and off-screen. She tells Retro Gamer about bards, burgers and becoming Becky

Words by Paul Drury

Dubbed 'Burger' due to her penchant for storing hamburgers in her desk drawer and feasting on them during coding sessions, Rebecca Heineman began messing about with her Apple II in the late Seventies and even created a custom cable to copy Atari 2600 cartridges. Her hacking skills led to coding jobs with Avalon Hill and Boone Corporation, and she was one of the four founders of Interplay, creators of such titles as *Wasteland* and *The Bard's Tale* series. She went on to work at EA on big name franchises like *Medal of Honor* and currently heads up Old Skûûl, an all-female games dev team, which includes her wife Jennell Jaquays. Visit oldskuul.com to see their remakes of *Descent*, *Battle Chess* and Lord British's debut, *Akalabeth*.

If we challenged you to a game of *Space Invaders* on the Atari 2600, who would win?
[Laughs]. I would destroy you. I won the national *Space Invaders* championship in 1980 when I had just turned 17. If it wasn't for that contest, my life would be vastly different. I would probably have gone into retail or gotten a factory job.

Videogame designer was not on your radar then?
I really wanted to be a train driver! I did have a part-time job before that tournament repairing videogames at the Electric Planet Arcade in Montebello, California. I was opening up cabinets, replacing chips, diagnosing problems, moving machines… those things were heavy!

Didn't you win a *Missile Command* cabinet as your prize?
Yes, but I actually wanted to win the second prize, an Atari 800, which came with a printer, disk drive and a bunch of games. If I'd come second, I'm pretty sure I would have developed games for that computer, not the Apple II, which I already had at home.

After that victory, you ended up writing tips for *Electronic Games* magazine, the first US publication of its kind.
When I won the tournament, I was immediately swamped by journalists from *Time* magazine, *Newsweek*, the *New York Times* and lots of others… I had interviews with national TV networks. I had my 15 minutes of fame! In the crowd was Arnie Katz, Bill Kunkel and Joyce Whorley and they'd just created this new magazine. They thought it would be cool to get me, a 'champion', to write articles about how to beat videogames. I said yes because I didn't know any better.

» [SNES] Becky worked on many FPS titles, including the SNES version of the daddy of them all, *Wolfenstein 3D*.

We note you were never asked to write tips about food storage.
You mean keeping burgers in my desk drawer? [Giggles] I still do that. It's the only way to get them just right… it started off as a necessity and I turned it into an art form.

It also led to your nickname, 'Burger', which started out as an insult, but you seem to have embraced it.
I had a personal reason for that. I'm transgender, so I had a different name back then and I hated it. I knew it was only a pen name and I'd drop it one day. I always knew my real name was Rebecca but I couldn't tell anybody. Back in the Eighties, coming out as transgender was an automatic firing offence ▶

» [VIC-20] *Chuck Norris Superkicks* was an early offering from Rebecca.

> If it wasn't for that contest, my life would be different. I would probably have gone into retail or a factory job
>
> Rebecca Heineman

» [Mac] Rebecca worked on the Mac version of *Heretic II*.

SELECTED TIMELINE

GAMES

- **CHUCK NORRIS SUPERKICKS** [1983] VIC-20/C64
- **ROBIN HOOD** [1983] VIC-20
- **MINDSHADOW** [1984] APPLE II/C64
- **THE TRACER SANCTION** [1984] APPLE II/C64
- **BORROWED TIME** [1985] APPLE II/C64
- **TASS TIMES IN TONETOWN** [1986] APPLE II/C64
- **BARD'S TALE I** [1986] APPLE II/C64
- **BARD'S TALE III** [1988] APPLE II/C64
- **WASTELAND** [1988] APPLE II
- **DRAGON WARS** [1989] APPLE II/C64/PC
- **OUT OF THIS WORLD** [1992] APPLE IIGS/SNES/MAC/3DO
- **WOLFENSTEIN 3D** [1995] APPLE IIGS/SNES/MAC/3DO
- **DESCENT** [1995] PC
- **DOOM** [1996] 3DO
- **QUAKE II** [1999] MAC
- **HERETIC II** [2002] MAC
- **MEDAL OF HONOR: PACIFIC ASSAULT** [2004] PC
- **MEDAL OF HONOR: EUROPEAN ASSAULT** [2005] PS2/XBOX/GC
- **HALF-LIFE** [UNRELEASED] MAC
- **GOLDENEYE: ROGUE AGENT** [2005] PS2/XBOX/GC
- **COMMAND AND CONQUER 3: TIBERIUM WARS** [2007] MAC/PC/XBOX
- **ALVIN AND THE CHIPMUNKS** [2007] PS2/WII/PC/DS
- **KINECT** [2010] XBOX 360

and I couldn't afford to destroy my livelihood. So when people started giving me this nickname of 'Burger', it was the perfect way for me to have a name I could carry with me to the day when I would finally come out. People wouldn't wonder, 'Who's this Becky person?', they'd go 'Oh, Burger! We know Burger!'

So you always knew you were Becky?
Oh yes, ever since I was a little girl. When I first confessed it to my parents, I was beaten almost to death. So I kept it quiet and it's one of the reasons I don't talk about my family anymore.

Is it why you left home when you were just 17?
I'd already ran away when I was 15 and lived behind a dumpster for a couple of months. Then I found out my parents were divorcing. My dad, who was the main source of my problems, wasn't around anymore, and I kind of tolerated my mom so I moved back in with her. I'd already dropped out of school by then and was working at JC Penny and at the arcade. Then I entered that competition and the rest is history. I could leave home and not deal with any of that family baggage.

You travelled from West Coast to East Coast and joined Avalon Hill in Maryland to code Atari 2600 games. Do you remember that as a happy time?
I remember lying about my age because you have to be 18 to sign a contract, but yes I was quite happy. I was being paid to do something I'd have done for free! Avalon Hill had several properties around Maryland and I had a room in one of them. Downstairs was a kitchen and a large, open development room with this long table and we all worked there, coming up with ideas for games like *Out Of Control* and *London Blitz*.

> "I wanted to play as a female character, and I didn't want to be told women didn't play these games"
> Rebecca Heineman

You then landed a job back in California with Atari… but only for two weeks!
Yeah, they fired everybody, including the guy that hired me! I remember being assigned my desk and a guy giving me code and telling me I was working on *Robotron* for the Atari 400. Then, nothing. I didn't get any more supervision. I suppose the management knew about the layoffs. Two weeks later, I arrived at work and heard people crying and walking around with boxes. On my desk was an envelope with my pay and a note saying, 'Thank you for your work at Atari.' I looked round and said, 'Erm, I guess I'll be going then…' to no one in particular, jumped in my pick-up truck and drove away.

At least you could put 'programmer at Atari' on your CV.
Actually, I got my next job at a company called Boone because I was a 2600 programmer and they wanted these Atari games converting to the C64 and VIC-20, games like *Robin Hood* and *Chuck Norris Superkicks*.

It must have been a challenge rendering the mighty Chuck Norris on such limited hardware.
Well, the VIC-20 at least had 2-bit sprites, one more than the Atari, but he was still just a white silhouette of a man… [bursts into Queen's *Bohemian Rhapsody*] Scaramouche, Scaramouche! To be honest, all Boone cared was being able to send off the final ROMs to Xonox, the games division of K-Tel, so they got paid.

Did you get paid well?
Oh no, they paid me shit. But remember, my only reference was working at JC Penny and an arcade so I thought minimum wage was what they paid for all jobs. Then we all got fired because the owner, Mike Boone, didn't want to do videogames any more. He wants to sell popsicles at swap meets.

Sorry, you mean ice creams at what we'd call car boot sales?
Yeah. He figured people would be there on hot summer days and he did some numbers… though actually, he did do the right thing, because after that didn't work out, he got into selling whiteboards and made millions.

This must have led to you forming Interplay?
We were all saying, 'Well, we've been canned. What we gonna do? Hey, why don't we make our own company!' It was Brian Fargo, Troy [Worrell], Jay Patel and myself – we were the ones making the games. Fargo got this guy Chris Wells to invest $25K and that was our seed to set up Interplay. Wells-Fargo… the jokes write themselves! I was kind of isolated from the business side and I had no interest in it. I just wanted to make cool stuff.

» [PC] The third *Bard's Tale* game was three times the size of *Bard's Tale II*, and it introduced automapping to the series.

FIVE TO PLAY

Games from Burger Becky's back catalogue you should check out

LONDON BLITZ

■ The Atari 2600 was notoriously difficult to code for but Rebecca's intimate knowledge of its inner workings allowed her to push the machine, as seen in this ambitious, if flawed, effort which features multiple modes and pseudo-3D presentaiton.

BORROWED TIME

■ Of the trio of adventure games Becky coded in the mid-Eighties, this is our favourite. The tale of private dick Sam Harlow's investigations in the New York underworld is witty and atmospheric, with impressive visuals and a clever parser.

DRAGON WARS

■ After some sterling work on *The Bard's Tale* series, especially the third instalment, Becky helped bring a more open world feel to this role-playing games, allowing hardy adventurers to craft their own path through this expansive game world.

TASS TIMES IN TONETOWN

■ A collaboration with Mike and Muffy Berlyn of Infocom fame, this surreal tale of animal mash-ups and punk hairdos is an early example of the point-and-click' genre. Look out for a full Making Of piece in a future issue.

OUT OF THIS WORLD

■ You may know it as *Another World* and you may well have first played it on the SNES, a conversion that Becky is especially proud of. It's worth looking at her 3DO port, too, which includes some lovely visual flourishes.

Between 1984-85, you produced a trio of adventure games, which pioneered a kind of point-and-click interface, yet you don't tend to get any credit for developing that whole genre.
I'm glad you noticed! *Mind Shadow, Borrowed Time* and *The Tracer Sanction* did well for Interplay and brought in some money to keep us going in those early years, but we never got the kind of press Sierra did. Once they did a deal with IBM to do *King's Quest* and they used that to push the PC Junior, *King's Quest* became a household name. They advertised everywhere and we didn't.

You also collaborated with Mike and Muffy Berlyn on *Tass Times in Tonetown*. Were you a fan of their Infocom adventures?
Yes, yes, yes, yes, yes! I'd always wanted to work with them and that project was a dream job. Working with [them], coming up with game concepts, the wackiness of the game, the jokes we put in. I remember the tagline, 'The closest thing to a drug trip without taking drugs.'

You seemed keen to experiment in that game.
Oh, I pioneered a lot of things in my time, like open world RPGs, point-and-click adventures, multistage animation, using a mouse with text adventures. Heck, even in *Bard's Tale* on the Apple IIGS, if you equip a new instrument, the music changes.

We'd call that a dynamic soundtrack nowadays!
It's like I'm the first esports champion with *Space Invaders* before Billy Mitchell and *Donkey Kong*, then many years later, he does all the press and people think he's the first.

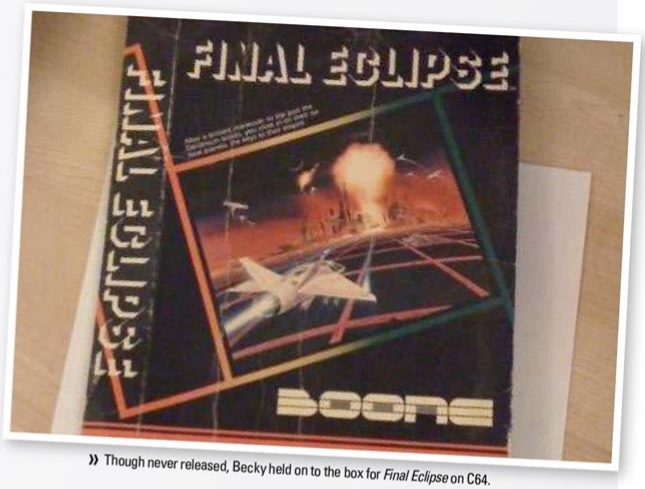
You mentioned *The Bard's Tale*. How did you come to be involved in that series?
Brian [Fargo] had a childhood buddy called Michael Cranford and he'd done *Maze Master*, which was essentially *Bard's Tale*-lite. Brian talked him into becoming an independent contractor, because Cranford had no desire to become an employee of anybody, so he did a deal – he'd do the game logic and then use my tools and Interplay staff to do the art. We all contributed things like storyline to flesh out the game and Interplay had some standing by this time, so we could do a deal with Electronic Arts. Back then, getting in bed with EA was a gravy train. If they sold your game, you were almost guaranteed massive sales. It was going to be 'win-win'.

So what happened?
Over time, I started complaining about stuff in the game design. For one, Cranford didn't have any female characters at all. He said to me, 'Girls don't play these games'. I thought, 'Ooh, if you only knew!' Later on, he fell out with Brian Fargo and ended up doing *Bard's Tale II* pretty much on his own.

But you take back control for the third instalment and that game is a real technical step up for the series.
I brought in automapping, new classes, modern weapons… I even wrote a scripting language so I could pack more in. *The Bard's Tale III* is three times larger than its predecessor but only takes up one more disk.

And you introduce female characters!
I did that for me. I wanted to play as a female character and I didn't want to be told women didn't play these games. I swapped gender roles, too, so the villains could be women, not just men. I also added people of colour because I wanted to be inclusive. I was well aware of the issue of white privilege and I wanted to do something about it.

You carry on innovating with *Dragon Wars* (1989), which was supposed to be the fourth instalment of the series but required a late name change to avoid a dispute with EA. You seem to be trying to create an 'open world' game before that term had really been coined.
That's right. My favourite memory of *Dragon Wars* is reading two different reviews. They both said they loved the game and described some of the adventures they went through… and they both wrote totally different things! The sad part is that we didn't advertise it properly and because we had to start a new franchise and not call it *The Bard's Tale IV* as we'd intended, that hurt sales.



» Though never released, Becky held on to the box for *Final Eclipse* on C64.

You also worked on *Wasteland*, which relocated *The Bard's Tale* style of RPG to a world after a devastating nuclear war.
Don't forget the film *Mad Max* came out in 1984 and that was the inspiration, with the look of *Ultima*. Everyone was doing fantasy at the time so this post-apocalyptic world with desert rangers was something different. That game was Mike Stackpole, Ken St Andre and Liz Danforth who came up with stories and game design and they used my graphics tools. Plus when it got to the photoshoot, they used my gun collection!

We read in an old interview that you always wanted to do *Wasteland 2* and of course that game did eventually get made in 2014. Were you asked to work on it?
I was not approached. I would've liked to have worked on but I wasn't surprised Brian [Fargo] didn't ask ▶

OFF WITH HER HEAD

The story behind a memorable calling card

Rebecca has a long history of hiding Easter eggs in her games, from text strings in the code saying 'hi' to game hackers, to her beloved burgers appearing in odd locations, but we were especially intrigued to know why an image of her being decapitated is a recurring theme. "That wasn't my idea," she assures us. "It was Brian Fargo. I'd been annoying him and other people at work by just shouting 'burger' when it was time to eat. He said if he heard me saying it one more time, he was going to chop my head off. I think he was joking. Anyway, he got an artist to do a picture of Mike Boone chopping my head off with an axe and put it on a floppy, so my computer booted up and that came on the screen. I saved that image – and signed every game I worked on by hiding that picture in there somewhere! I had a feeling, even back then, that people would try to take credit for things they didn't do. To ensure no one could take away what I'd done, I'd put that image in so people would know I was part of it."

» [PC] Becky helped bring 3D space action to the PC with Interplay's *Descent*.

me. Let's just say some people want to claim Interplay was a one-person show and I'm saying, 'No, there were four founders'. When people rewrite history, that's a problem for me.

You seem to have mixed emotions when you look back at your time at Interplay.
We grew slowly for the first five or six years and it wasn't till we made a lot of money from *Bard's Tale II* that we really started our growth. After that, it felt like we moved the company every two years because we were growing so much but you know, I did hide away in my cubicle a lot.

Were you at least making good money?
No. When I asked for a raise, they'd tell me I had stock in the company. I said, 'Yeah but I still have to eat… and I'm sick of cold burgers from my desk drawer because I can't afford a fridge!' I did get more money after I threatened to quit but I don't think they should have made me fight for it.

You eventually left Interplay in the Nineties after more than 11 years there. What had changed at the company over that time?
Everything. It wasn't the company I'd jointly founded. I'd meet someone in the halls and try to be friendly and say, 'Oh you must be new here, I've never met you' and they would reply, deadpan, 'I've been here a year.' Then there was the constant knowledge we were being run into the ground. I would see all these games greenlit, like *Stonekeep*, which they said would take nine months [to develop] and I knew that would never happen. It ended up taking over five years. I was called a naysayer and not a team player – but I was right.

In the second half of the Nineties you worked on many first-person shooters. Was it good to have a change from all the adventure games you had coded in the preceding decade?
Well, at Interplay, I'd worked on *Descent* and on the side I'd done *Wolfenstein 3D* for the SNES, so it was a genre I knew about. Later I'd work on *Quake II*, *Half-life*, *Medal Of Honor* and lots of others…

Including the 3DO port of *Doom*, which sounds like being handed a poisoned chalice.
It was but 3DO were lied to as well. This guy was telling in the press about how *Doom* for the 3DO was almost done and it had new levels, new weapons and how it was going to be the definitive version. I just had to finish it off. 3DO was of course excited… only to discover the reality, which was nothing like what was promised. It was all lies. At least I got the game out…

You also converted *Wolfenstein 3D* to the 3DO, which turned out much better. Do you think the 3DO could have ever really competed with the PlayStation?
The hardware itself competed quite nicely. The memory architecture was really quick, the multitasking operating system was ahead of its time – at that level it was a nice

» Rebecca has a brief stint with the 3DO working on *Doom* and *Wolfenstein 3D* ports for the system.

» Becky's *Half-Life* port for the mac was never commercially released.

» [PS2] Becky worked on some big-name franchises at EA, such as *Medal of Honor: European Assault*.

design. Where they took in out the back and shot it in the knees was the business model. Trying to sell a game console like you would a VHS recorder was suicide. Everyone in the console market, back then and still now, sells the hardware at a loss and makes their money on selling software. Samsung, Panasonic and the other manufacturers had to make all their profit on selling the machine which led to insanely high prices.

You also did conversions for the Mac including *Half-life,* which was finished but never released.
That always hurts. Imagine you've spent all this time making something and then three weeks before it's due out, you're told they're going a different way. They give you your pay cheque, say thanks, but you know it'll never see the light of day. Anyone would be crushed.

Come the new millennium, you work on big name franchises like *Medal Of Honor* and *GoldenEye,* which must've meant being part of a large team. Surely you weren't still hiding in your cubicle?
I was starting to open up but I only went from being a triple-A introvert to the extrovert I am now when I came out to the world as to who I really was – and that was at EA. I stopped hiding away.

Were people broadly accepting of you when you transitioned to Rebecca?
No. I went through a divorce and some lifelong friends turned away from me. The majority of the industry would've isolated me but I want to credit EA here. Some call them an evil corporation, but to me they were the best ever. They actually had a policy on what to do if you were transitioning gender and it said anyone who discriminated against me would be fired. I was like, 'Wow! I'm going to do it!' I was still all ready to be fired because I didn't know if they'd follow the policy and have to look for a new career.

Did you sense you weren't alone?
Oh there was Jessica Mulligan, Dani Bunten, Jamie Fenton, Wendy Carlos, Garry Kitchen's sibling Jessica Stevens. I knew there were plenty of transgender coders in the industry but I also knew most of them had had bad endings. Dani committed suicide, Jessica was bullied into quitting Interplay… not everyone is trans-friendly in the industry.

The industry still lacks diversity, as you experienced working on Microsoft's Kinect.
[Laughs]. Yeah, I did program [on that project] but my real contribution was getting it to recognise dresses. They had code which would help [the camera] make a 'first guess' of what pose you were in but the problem when all the developers are men, it assumed you were wearing pants [trousers – English Ed] I was testing it, wearing a dress, and noticed it wasn't tracking my legs at all. I brought it up and they said, 'Oh we didn't think of that.' Oh, give me a break! I suppose you never think of adding in dresses if you've never worn one but then they started adding 'models' with people wearing dresses, skirts, even religious robes. That project was really fun. I'd worked on motion capture before but this idea of a camera tracking your whole body was a game-changer.

You're still making games at, Old Skûül, almost 40 years after you started in the games business. Is there a secret to your longevity?
I don't pigeonhole myself into one genre. I've worked on RPGs, kids' games, Real-time strategy games, first-person shooters, even *Minecraft*. What got me in to the industry in the first place was my thirst for knowledge and teaching myself how to do stuff. I'm still doing that today.

We almost forgot to ask – do you still have that *Missile Command* cabinet?
It lived in my house for many years until I sold it but I think I know where it is now… and I'm looking to buy it back!

> "It felt like we moved the company every two years because we were growing so much"
> Rebecca Heineman

YOU ASK THE QUESTIONS

Becky rummages through our mailbag

MERMAN: Did you play tabletop role-playing games?

Yes! My character was Halifax and she was a level 10 Mage, and a bunch of us at Interplay would have *Dungeons & Dragons* game nights.

NIGHTSHADOWPT: How hard was the transition between console/computer generations?

Every new generation was like starting over. Crack open the books, start learning again and come up with new ways to play games. It's the same with the Switch right now!

FGASKING: Have you got anything left of the unreleased *Final Eclipse*?

It's basically a tech demo, but yes I still have the source code. The plan was to release it on cartridge for the C64 and VIC-20, but Boone went bust before I finished it though they did make boxes and I have one. It was akin to *Star Wars* by Atari, it had that 3D line drawn look, and there were towers to shoot but you could fly in multiple directions.

NIGHTSHADOWPT: How do you view the resurgence of the 'bedroom coder' and small game dev teams?

It's a blessing and a curse. It's so easy to enter the market using Unity or Unreal, anyone with a game idea and art skills can put something together. Some of the most innovative games ever made are coming out, but there's also a plethora of garbage and the market is saturated. People making great games are going out of business.

B.A.
141
ST·2
2
KING
MAX
RYO
IORI
TERRY

The King Of Fighters 99: Evolution

IT FEELS GOOD TO BE KING

» RETROREVIVAL

» DREAMCAST » 2000 » SNK

I've recently been stockpiling a lot of multiplayer Switch games, since I am catching up with a bunch of my old university housemates. We all played games a lot, and our multiplayer sessions could get heated – our *Mario Kart Wii* games could reportedly be heard from down the street, and I remember *Pro Evo* causing more than one person to storm off. I even remember one of the guys getting punched in the balls for defeating his girlfriend at *Dead Or Alive 2*.

Another guy in our house was particularly stubborn and hot-headed. He was the sort of guy who'd try to chop an onion with one broken arm, get pissed off because it'd roll out from under the knife, but still refuse to let anyone help him. One night, we were playing *The King Of Fighters 99: Evolution* together, and I beat his entire team with King. I did the same in the rematch. After a couple more games, that was it – nobody was putting down a controller until he'd beaten King. She had to be in my team, and she had to be first out.

He was unhappy when I hit ten victories. He was downright angry at 20, and it was frankly uncomfortable at 30. Finally, as I was attempting my 40th straight 3-0 sweep, he managed to not only beat King but my entire team, bringing the score to 39-1. I was too relieved to tell him the random character select had given him the final boss. So I might just leave *BlazBlue Cross Tag Battle* at home… ✱

RETRORATED

>> After a rather lengthy Kickstarter campaign, ToeJam and Earl return for a brand-new adventure. We also go dungeon crawling with the latest Etrian game and find out why Nick has disappeared online every evening

» [Switch] The Hyperfunk Zone is trippy to look at and requires some pretty good reactions.

ToeJam & Earl: Back In The Groove

"GET UP OUT YOUR SEAT, THE GRAND GROOVE IS BACK"

INFORMATION

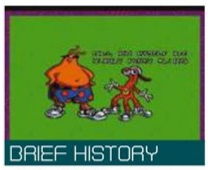
- » **FEATURED SYSTEM:** SWITCH
- » **ALSO ON:** PS4, XBOX ONE, PC
- » **RELEASED:** OUT NOW
- » **PRICE:** £16.99
- » **DEVELOPER:** HUMANATURE STUDIOS
- » **PUBLISHER:** IN-HOUSE
- » **PLAYERS:** 1-4

Playing *ToeJam & Earl: Back In The Groove* in the office has been an interesting experience. The original game was a cult classic rather than a runaway hit, but we were surprised by the number of people that walked by and said, "I remember *ToeJam & Earl* from the Mega Drive!" What's less surprising is that usually, the very next thing out of their mouths was, "I didn't really get it," – the original game was always odd. If you're one of those people and you're hoping that this series revival might be a bit more accessible, then you're out of luck – this game was crowdfunded and has been built with existing fans in mind first and foremost, so it's as weird as ever. The good news, if you are one of those existing fans, is that the game should fulfil your wishes and delight you.

The design of *Toejam & Earl: Back In The Groove* follows the Roguelike template of the original game, rather than either of the sequels, and tasks players with retrieving ten spaceship pieces after an unfortunate incident involving the spaceship, Earth and a black hole generator. This takes place across 25 fixed levels or, after you unlock the option, randomised stages with an optional hardcore mode. Along the way you'll gain experience by exploring, be accosted by enemy earthlings, and collect presents with a variety of both positive and negative effects. These range from negative effects to positive power-ups – you might get wings with which to fly, you might get a slingshot to fire tomatoes at the baddies, or you might get an instant rank demotion. Once you've identified a present, it'll be known until a randomiser hits.

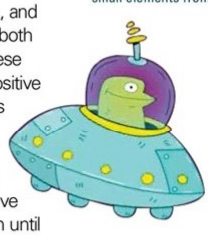
There's a fair bit more variety to proceedings, when compared to the original game. Levels are a lot less barren – as well as featuring various types of terrain, they're now filled with bushes, trees and houses which can be searched for items, as well as sunflowers to hide behind. The Hyperfunk Zone bonus stage returns from the second game and grants experience and presents,

» [Switch] The split-screen mode enables players to explore independently, covering ground more quickly.



BRIEF HISTORY

» *Toejam & Earl* is an odd series; the games were cult hits rather than runaway successes, but the series has attracted passionate fans. The latest game was crowdfunded in February 2015, raising $508,637 from 8,873 backers. It returns to the formula of the very first game, drawing small elements from the sequels.



★ PICKS OF THE MONTH

DARRAN

Panzer Dragoon Saga

I've not played any new games at all but I have managed to get to the third disc of Sega's magnificent RPG. Go me.

DREW

Final Fantasy IX

'But Drew, didn't *FFIX* come out in 2000?' Yes. Yes it did. But this 2019 port has remastered character models, so...

» [Switch] Big Earl's gambling with the cosplay nerds – can he roll a 14 to get some money?

✱ WHY NOT TRY

▼ SOMETHING OLD
TOEJAM & EARL (MEGA DRIVE)

▼ SOMETHING NEW
BELOW (PC, XBOX ONE)

» [Switch] Some presents, like the Icarus wings here, are super useful – we're flying!

as do the rhythm-based bonus games. You're also given a greater selection of characters – six from the start and nine in total, each with their own stats, perks and starting items.

The original was fun played alone but better with a partner, and that's still true here. Co-op multiplayer is supported for up to four players, and while support for local multiplayer feels expected on Switch these days, it's nice to see it available on all platforms and even better to see the return of the split-screen of old. Additional players can drop in and out mid-session, which is appreciated.

The best thing the game has going for it is its style – it's weird but it works. The comic book visual style works well for the Nineties throwback setting, and the music is just as great as you'd hope. ToeJam and Earl have always been strong characters and we like their speech bubble interactions, but we always found that the stars of the games were the earthling enemies that poke fun at odd human behaviour. Some of the new ones are great – we particularly like the FBI agents that give *Men In Black* a nod. We also like some of the new helpful earthlings, like Gandhi Ji who forms a protective circle, as well as the fact that the shark's sound effect is literally a bloke doing the *Jaws* music.

But it's worth noting that *ToeJam & Earl: Back In The Groove* has some issues with difficulty. While it's not that hard to reach the later levels (we hit 22 on our first attempt), the difficulty seems to spike quite hard once you do, with enemies becoming much faster and stronger. They can be quite irritating, too – enemies such as the cupid and the internet troll are capable of scrambling your controls, for example. The inquisitor is also a jerk, as he'll drop you down a stage if he catches you.

Sometimes, multiple bad things can stack up to cause enormous frustration. In one run we'd hit a tight spot during one of final few levels, and used a present out of desperation not long after a forced randomisation. Not only was it the Total Bummer which kills you instantly, it was our last life. The frustration almost caused us to throw the controller through the TV set because the Game Over screen really means something here. If you load up a save and you die, that save is *gone* – literally deleted, never to be loaded ever again, and that may just be too unforgiving for some people's sensibilities. Fans of schadenfreude may wish to watch Twitch streamers playing the game, though.

We've enjoyed *ToeJam & Earl: Back In The Groove* and hope to see the characters return, but we can't give it a universal recommendation. The game can be funny and enjoyable with friends, but the humour won't be to everyone's tastes and the random elements leave the game feeling somewhat capricious at times. If you still love the original *ToeJam & Earl* this throwback is an easy recommendation, but if you're not a fan we'd advise caution. ✱

In a nutshell

If you're already a fan, you've probably already bought it. If not, this is a good update of a cult classic that offers both oddball humour and multiplayer laughs – but only if you've got sufficient patience to endure its harsher moments.

>> Score **75%**

» [Switch] If you pay off the fat lady, she'll follow you and sing, defeating any nearby enemies as she goes.

★ PICK OF THE MONTH

Tetris 99

» **System:** Switch » **Buy it for:** Free (Nintendo Switch Online required) » **Buy it from:** eShop

We'd never have guessed that *Tetris* would follow the likes of *PUBG* and *Fortnite* into the battle royale arena, but what sounds like an offhand joke at a planning meeting is actually a superb take on the timeless puzzler. *Tetris 99* plays much like any other multiplayer *Tetris* game. You arrange blocks to form lines, and send garbage lines to opponents whenever you clear multiple lines, create a combo or clear with a T-spin. Those garbage lines are sent to whoever you're targeting – it's random by default but you can manually target, or choose autotargeting rules to aim for players who are struggling, succeeding or attacking you. You can be targeted by multiple players, but you'll send out more garbage to compensate. Whenever you knock out another player, you will earn part of a badge and any badge parts they were holding – these also boost your garbage output. If every other player is eliminated, you win.

Very little of this is actually explained to the player, as *Tetris 99* lacks any in-game instructions or tutorial mode to explain the significance of its unique mechanics. That's a shame as it makes the playing field less even, but it's really our only major criticism.

The game is very well presented, with a clean look that makes it easy to see what's happening, and music that ramps up the intensity as the field thins out. The game is smartly designed, too. It's free of targeted griefing because it's virtually impossible to coordinate, making it one of the friendlier online gaming experiences that we've played. The mechanics ensure that the best players tend to do well consistently, with our win rate easily surpassing the 1.01% expected of random chance. However, we've found that it's very satisfying for players of all skill levels – because the expectation of winning is so low, people tend to focus on beating their own personal bests. If you've got a subscription to Nintendo's online service, make sure you drop in.

>> Score **89%**

» [Switch] We're not sure who came up of the idea for *Tetris 99*, but they deserve a raise.

» [Switch] If you ever see Nick in your game lobby, just run. Run fast, and run far.

Etrian Odyssey Nexus

» **System:** 3DS » **Buy it for:** £35.99 » **Buy it from:** eShop, retail

This has been announced as the final *Etrian Odyssey* game on 3DS, but the series is leaving the platform in style. This dungeon-crawler sticks very closely to the series' established formula, but that's no bad thing – this is a very heavily customisable RPG, with a huge amount of content to explore using your own created characters. In design terms, the game is resolutely old school – you have to manually map dungeons on the touch screen, and it's a challenging game. If you fail to prepare for battle adequately, you will definitely die.

If you've played one of these games before, there are no big changes to sway your feelings on the series and it may feel too familiar. If you haven't yet, it's a very rich and polished take on the genre that's worth trying.

>> Score **80%**

BlazBlue Centralfiction Special Edition

» **System:** Switch » **Buy it for:** £34.99 » **Buy it from:** eShop, retail

Though most major 2D fighting series have abandoned pixels for polygons, *BlazBlue* has stuck to sprites and now stands out for that very reason. Much like other Arc System Works fighting games, it offers refined and elaborate mechanics with a 'stylish' mode for casual players, as well as a cast that vary in both their looks and playstyles. This Switch version is packed with content – all the DLC of previous versions is included, so you've got over 30 fighters, a story mode and other single-player challenges like the character developing Grimoire Of Abyss mode, plus the Speed Star and Alliance modes that offer unique takes on time attack and survival challenges.

>> Score **86%**

Presented by **Hull College**, **C64Audio.com** and the **Hull Philharmonic Orchestra**

8 BIT Symphony

6 new arrangements from Rob Hubbard
Full symphony orchestra for maximum power
A spine-tingling, emotional evening
Meet Rob Hubbard and Paul Norman

Tickets available at: **hulltheatres.co.uk**

Visit the concert website at: **8-bit-symphony.com**

Gamers HOMEBREW

Brewing since 2005

» [Windows] Heading to infinity, and possibly beyond if the fuel doesn't run out.

Gaming NEWS

LINES AND SHAPES

We've mentioned the long-running Comp.Sys.Sinclair Crap Game Competition in the past, but the instalment for 2018 recently drew to a close with 26 completely serious and not even slightly silly entries for the Spectrum, its clones and predecessors, including programs such as *Space 1999* and *Advanced Lawnmower Simulator Vs Zombies*.

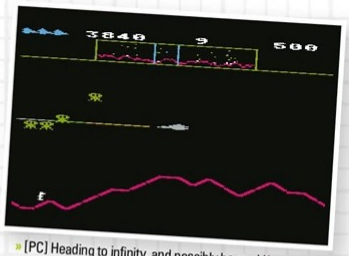
One of the entries called *Dog Walk* was even created by one of Activision's senior technical directors. All of the entries and news including which games 'won' or 'lost' in each category can be found at the website behind Kikstart.me.uk/csscgc-2018.

Another programming challenge that is taken just a teensy bit more seriously is the 10 Liner competition which is open to all 8-bit systems, with the rules stating that entries must be programmed in ten or less lines of BASIC. There are a few categories to allow for computers with different line lengths but that does still sound restrictive for the programmers taking part, although a couple of entries for previous iterations have included clones of arcade classics *Defender* and *Millipede*, so it'll be worth keeping an eye on what materialises this time around. The competition website is behind Kikstart.me.uk/10-liners-2019 and there are links from there to the results from previous years.

Switching to Windows-based PCs, Psyshteek's *Jetpack Jaxx* is a free-to-download action game with a Spectrum-inspired art style. The titular character rather unsurprisingly has a jet pack and either runs or occasionally flies around flip-screen levels in search of objects needed to progress further into the game or fuel for the jet pack itself. Kikstart.me.uk/jetpack-jaxx-win will fly over to the developer's Itch.io page where the game can be downloaded and we've heard that Psyshteek is currently working on another game called *Ryane McLaine* using a similar art style but adding scrolling backgrounds and weaponry.

Finally we end by returning to the Spectrum for *Mike The Guitar – The Shooter*, a horizontally scrolling blaster set in the same universe as the first, platform-based *Mike The Guitar* game where musical instruments are alive. It was created with Jonathan Cauldwell's *Shoot 'Em Up Designer* and more information can be found over at Kikstart.me.uk/guitar-shooter-spec.

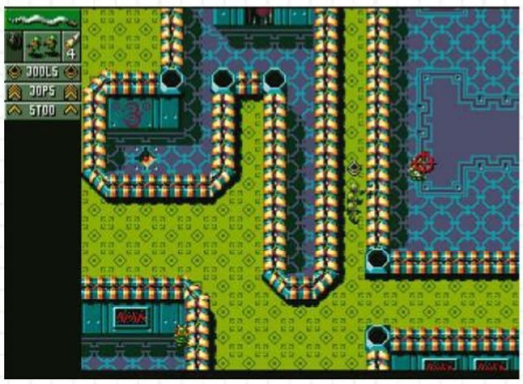
» [ZX Spectrum] Avoiding the undead during garden maintenance in *Advanced Lawnmower Simulator Vs Zombies*.



» [PC] Heading to infinity, and possibly beyond if the fuel doesn't run out.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **retrogamer@futurenet.com**



» [PC] Taking *Cannon Fodder* into the future with one of the provided demos.

A LOOSE CANNON

It's been around for a while, but our attention was recently drawn to *Open Fodder* as version 1.5 was released. It's an open source version of Sensible Software's *Cannon Fodder* and its sequel.

Open Fodder ships with some demo stages, but to play the full game a retail version is required to extract the level data. This can be taken from a couple of sources including original Amiga disks and the version available via GOG. For more information about *Open Fodder* itself or extracting the data, have a look at the link behind Kikstart.me.uk/open_fodder_win.

THREE, FOUR, FIVE

***Joyas* started life as a ten line, BASIC-powered 'match three' game but has recently been expanded to offer a wider range of features.** As is usually the case with these games, the objective is to line up three or more of the same object; this group is then removed from the playfield and objects above tumble downwards to fill the newly-created gap.

The work seems to be ongoing at the time of writing, but what's there is fun to play and we particularly enjoyed the timer-based game modes. Kikstart.me.uk/joyas-a8 takes you there.

» [Atari 8-bit] Just about to get five waffles in a row.

HOMEBREW HEROES

Alexander Vormbrock is the mind behind porcine blaster Flight Of Pigarus for the Master System. We were interested to find out more about the process of teaching pigs to fly and indeed blast enemies

THE BIG INTERVIEW

To begin with, we have to ask where did the idea for a flying pig in a shoot-'em-up come from?
A couple of years ago, long before I got into Master System development, I helped out another developer by drawing a few custom sprites for his Windows game. One of those sprites was a top-down version of the character Michael from the *Parodius* series. The project went into a different direction, and the cameo was scrapped, but the idea of a winged pig flying over a vertically scrolling landscape stuck with me.

I really like cute-'em-ups, as they make us realise the cliches the genre is built upon, while backing up the weirdness with actually solid level design. So when I finally set out to make my own shooting game, it was clear that I wanted go down that road. Everything just fell into place, and from that *Pigarus* was born.

And what's actually involved in creating such an impressive Master System game?
Perseverance, first and foremost. Development took a lot of time, and sometimes it wasn't easy to stay motivated.

Making a busy game like *Flight Of Pigarus* requires some careful planning and a good idea of how to distribute the system's resources. Otherwise you'll quickly end up with copious amounts of slowdown and flicker. The Master System's hardware is very nice, but it does have its idiosyncrasies. It's always better to design a game around them and play to the system's strengths than constantly fighting its limitations.

What kind of feedback have you received so far from Master System owners?
The feedback so far has been overwhelmingly positive, both from the Master System community and from fans of the genre. In fact, I am aware of several forums where fierce high score battles are being fought. I am really happy people seem to be enjoying the game so much.

» [Master System] Juggling all of the elements required to keep a pig in the air.

» [Master System] He's really let being the boss go to his head.

Looking at it now, is there anything you would have done differently with hindsight?
It would have been nice to be able to add some kind of speed gauge to the HUD, but I didn't have any video memory left to include one more sprite. As it is, you can tell the player's current speed by watching how fast Pigarus is flapping his wings, but that's maybe a little too subtle.

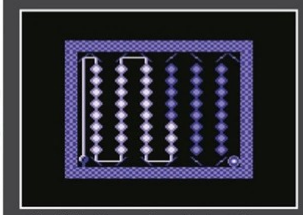
Finally, do you have any projects coming up in the future that our readers might be interested in?
I haven't decided on any follow-up project yet, but I have a couple of ideas I want to play around with. The next game is probably going to be either a 32K abstract game or a platformer/shooter hybrid or a flip-screen action adventure.

DO YOU REMEMBER?

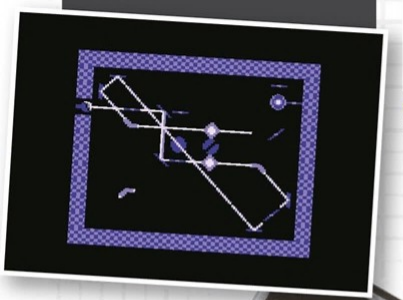
***Beamphobia* for the Commodore Plus/4 is an illuminating game, quite literally, in fact, since the objective is to guide a beam of light from its source and through any crystals in the playfield before ultimately striking a target.** There are also mirrors and lengths of fibre optic cabling which can be used to guide light around the playfield and spheres with a channel that the beam can pass through, all of which can be rotated at will.

There isn't a time limit to worry about and making a mistake just resets the current stage, so players can spend time thinking about each puzzle. For anybody who finds themselves running out of puzzles while playing the original, there's a sequel called *Beamphobia 2 – The Lost Levels*. Head your way over to Kikstart.me.uk/beamphobia-264 and Kikstart.me.uk/beamphobia-2-264.

» [Plus/4] Planning for fibre optic broadband has never been so difficult.



» [Plus/4] Rack them up for a trick shot with *Beamphobia 2*



PHANTOMAS 2.0

» **PLATFORM:** AMSTRAD CPC » **DEVELOPER:** PAKETE SOFT » **DOWNLOAD:** KIKSTART.ME.UK/PHANTOMAS-2-CPC » **PRICE:** FREE DOWNLOAD, 8.75 EUROS CASSETTE

» [Amstrad CPC] This is, as Lynn Faulds Wood used to say, a potential deathtrap.

» [Amstrad CPC] Making a climb upwards from the graveyard of Dracula's abode.

Hailing from the Andromeda galaxy and programmed to boldly seek out new civilisations deemed to be worth pillaging, Phantomas the sentient android travelled the universe for decades in search of new places to steal from. Visiting Earth proved to be his downfall however, and half-inching the contents of some millionaire's vault led to the thieving machine's arrest. But while he languished in a cell, an unexpected and enticing offer turned up from the powers that be. Our protagonist can choose to take on and defeat some ne'er do well called Dracula to earn his freedom.

The Count's castle is huge and Phantomas is in search of the crucifix, stake and hammer required to complete his mission without even wondering why a vampire would keep these items just lying around. To make the final battle a little more fair there are six shuttered windows which can be magically opened by using the switches in the room where they're located and these allow sunlight in that weakens Dracula. There are also keys which can be used to unlock otherwise inaccessible areas of the map, but finding and using any of the objects involves working around the patrolling creatures of the night, timer-controlled laser defences and a series of motion-activated traps which launch spears when triggered.

This is a remake of the game *Phantomas 2* and, along with some welcome cosmetic upgrades including the sprucing up of the visuals and some sold in-game tunes, changes have also been made to the control system which make the titular droid significantly easier to manoeuvre. Dracula has recently had his castle remodelled to remove some of the nastier death traps - although the contractors have apparently added a few new, potentially deadly features in the process - but it's still packed to the rafters with hazards. Gathering all of the items needed to defeat Dracula without being skewered or zapped in the process is still very difficult and *Phantomas 2.0* has, like the original Dinamic game it's based on, been aimed at more hardy adventurers.

» Score **88%**

QUADRON

» **PLATFORM:** ZX SPECTRUM
» **DEVELOPER:** ANDREW BEALE » **PRICE:** $4.99
» **DOWNLOAD:** KIKSTART.ME.UK/QUADRON-SPEC

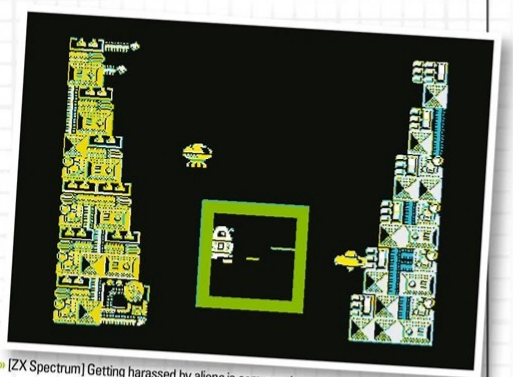
» [ZX Spectrum] Robot has been making a lot of new 'friends' recently in *Quadron*.

Welcome to the Quadron, a mining facility that's under attack from aliens wanting to steal and use the crystals being unearthed. Despite being unmanned the complex isn't unarmed, but there's only the one guardian droid in operation which must be used along with extra weapons it can collect to see off the enemies.

Roaming around and blasting almost everything that moves will work – at least until Fetchers start upgrading themselves with stolen crystals – but playing properly is more involved and the droid's operator will need to both monitor the scanner and manage the energy levels for extra weaponry found dotted around the facility.

Properly getting into *Quadron* will take time and might prove to be a little too complicated for players just looking for some straight blasting, but those who like their action games to be more involved should take a closer look.

>> Score **80%**



» [ZX Spectrum] Getting harassed by aliens is commonplace within the Quadron.

GRAVITICA

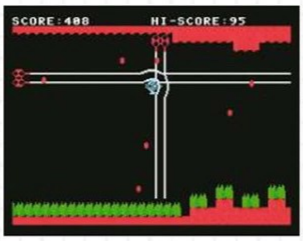
» **PLATFORM:** MSX
» **DEVELOPER:** YUSUKE MIYAUCHI » **PRICE:** FREE
» **DOWNLOAD:** KIKSTART.ME.UK/GRAVITICA-MSX

The premise behind *Gravitica* is the same as most scrolling blasters, except the shooting. The aim is to avoid collisions with the landscape and using the craft's gravity field generator to bend the deadly lasers fired into the playfield to allow the ship can pass through them safely.

Bending gravity does have a downside: there are enemy projectiles drifting around the screen and, as long as the gravity generator is enabled, they'll be drawn towards the player so this awesome power needs to be used sparingly. Each stage has a boss which launches more of these bullets which can be repurposed by the gravity field to destroy it.

This is an interesting take on shmups that requires some acclimatisation to begin with. After that it dishes up a solid challenge, especially since you only have one life.

>> Score **79%**



» [MSX] The gravity field generator, being used to bend a couple of otherwise fatal lasers.

ROUNDUP

The village of Grynnet has been taken over and enslaved by the cruel witch Grizelda and her dark magic. Just two people on the outskirts of town aren't overcome and, while neither is in a fit state to battle, one of those is Runella the sorceress and her young niece Laetitia can help if the right potion ingredients are collected. Pick up a broom from Kikstart.me.uk/laetitia-spec.

Microfair Madness documents the tale of a text adventure dev whose *Friday The 13th* goes from bad to worse when he tries to drop off his latest masterpiece with the publisher at their Microfair stall but forgets to pack the required ticket to get in. The story behind development of this Amstrad from Kikstart.me.uk/microfair-cpc is almost as convoluted and twisted as the game itself.

DANGAN GB

» **PLATFORM:** GAME BOY » **DEVELOPER:** SNORPUNG » **DOWNLOAD:** KIKSTART.ME.UK/DANGUN-GB » **PRICE:** FREE

Released to help celebrate the Game Boy's 30th birthday, *Dangan GB* is a bullet hell-style shoot-'em-up for Nintendo's venerable handheld console. The stages have just one boss to battle, but each has an unlimited ammo budget and spews forth projectiles at a truly alarming rate, so the player must try to weave between this onslaught while landing hits.

Good eyesight is a must for this game – especially if playing on a classic Game Boy's screen – and, while there are three difficulty settings, these seem to be more about how many lives are dished out rather than tweaking other elements like how many bullets are being fired by the boss or the number of hits required to destroy it. This does mean that *Dangan GB* can be punishingly tough, even on its easiest setting, and will probably only appeal to the more seasoned fans of the genre.

>> Score **83%**

» [Game Boy] Each enemy has a couple of phases, but they don't stop spraying bullets.

HOW TO

QUICK GUIDES TO HELP YOU GET THE BEST FROM YOUR GAMES

DIFFICULTY

●○○○○

LOW

WHAT YOU'LL NEED

- PC
- GZDOOM
- DOOM.WAD
- EXTRA .WAD FILES

DON'T FORGET...

- Make sure you've got an antivirus program installed when downloading programs from the internet.
- You'll need a registered version of doom.wad for some things – if you don't have one, you can buy *Doom* and find the file in there.

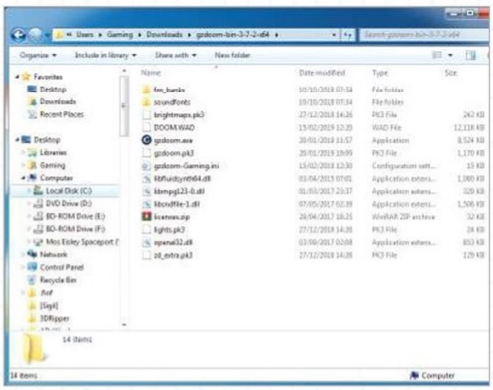
HOW TO...

GET READY FOR SIGIL

With John Romero's Sigil due for release in the near future, now seems like a perfectly good time for us to brush up on running Doom engine games and mods on modern PCs

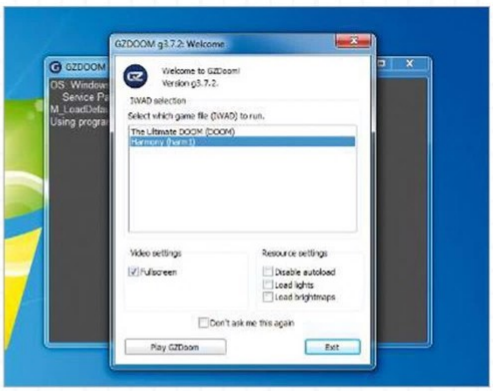
01 Download GZDoom from zdoom.org. This is an implementation of the *Doom* engine that runs on modern operating systems and allows for more advanced hardware rendering, new features that weren't possible in the original engine and more. Extract the archive to somewhere easily accessible, since you'll be revisiting this folder frequently.

02 Without an IWAD file containing the game data, GZDoom doesn't do anything. For Sigil, you'll need a registered copy of the doom.wad file, which you can get from your copy of *Doom*. Copy it into your GZDoom folder. GZDoom can also run many other IWADs including *Hexen*, *Chex Quest* and even free ones like *Harmony*.



03 Grab a mod containing extra levels, known as a PWAD (though confusingly, these also use the .wad file type). These replace certain elements of the original IWAD. You can find loads of them at doomworld.com/idgames. Being inclined towards all things retro, we have gone for the classic 1995 fan-made *Doom* episode *Fava Beans*.

04 Put the .wad file with the extra levels into your GZDoom folder, then drag it onto GZDoom.exe to start it up. You'll have to select which of your IWADs you want to apply it to, if you have more than one in the folder – you don't want to try running a *Doom II* mod in original *Doom*.



Something you'd like to see a guide for? Contact us at:
RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

ANY QUESTIONS?

Q: Wait a minute, what's *Sigil*?
A: *Sigil* is a set of *Doom* levels by original developer John Romero, it was set to be released as a free download or a paid physical release in February this year, however it has since been pushed back to April. The levels are a new fifth episode which takes place between *Doom* and *Doom II*, and sees you fighting through further depths of Hell after the final transporter back to Earth is glitched. We interviewed John about the project in issue 189. For more information, please visit the game's official site at romerogames.ie/sigil.

Q: So how do I get my hands on that doom.wad file?.
A: You'll need to get it from your copy of *Doom*, as we mentioned. That will be an actual, registered version of the game, not the shareware version, and you won't be able to get it from any home console versions you might have. If you don't already have a computer version to hand, old copies of *The Ultimate Doom* are readily available on eBay either as standalone games or as part of a trilogy pack. Alternatively, you can pick it up via digital retailers such as Steam and GOG, where it should set you back less than £5.

"If you don't already have a computer version to hand, old copies of The Ultimate Doom are available on eBay"

05 If all has gone well, you should be playing some *Doom* levels that an enterprising player has come up with. Of course, if you want to start the game as normal without the extra PWAD levels, you can just open gzdoom.exe as normal and select your preferred IWAD.

YOUR QUESTIONS ANSWERED...

A selection of smaller questions from readers...

DECAY AWAY

How do I protect old floppy disks against bit rot?
Lewis Packwood via Twitter

Sadly, this advice will only get you so far. The unpalatable truth is that many floppy disks are now coming to the end of their operational lives. The December 1983 issue of *Creative Computing* (volume nine, issue 12) carried an article on floppy disk storage and handling, with advice from Maxell and Verbatim. While Maxell claimed that a disk would last 'practically forever', Verbatim estimated 30 years – and reality has shown that this was a pretty optimistic guess. So while we're not letting go of our original disks any time soon, our advice is that any data you have on floppys should be backed up as soon as is practical, particularly if it is rare or unique. For advice and resources on backing up floppy discs, visit The Archive Team's page on rescuing floppy disks at bit.ly/floppybackup.

SPACE TREK

How can I play the classic game *Elite*?
dave4shmups via Retro Gamer forum

Ian Bell's Elite Homepage website offers a number of versions of the game to use in various emulators, as well as links to a browser-based emulation of the BBC Micro original. You can find the site at elitehomepage.org.

ROTTEN CORE

I've just bought *Metal Wolf Chaos* from an eBay seller, but the disc's got a weird dark patch of what I think is disc rot on it – there was no evidence of that in the pictures. The seller says he's tested it and it plays fine, though. Should I take the chance on it?
Darran Jones via unfortunate real life experience

Send it back. The chances that the seller tested the game to completion are very slim indeed, and even if it does work now, there's no guarantee that the rot won't creep further in and ruin it. Since eBay policies generally favour buyers over sellers quite heavily, you should absolutely ask for an exchange or refund. Nick finds that being single means that he has come to cherish faulty eBay items, as the disputes he enters into with sellers provide him with the kind of human contact that he rarely receives outside of the office. He has told us that if we're ever lonely, we should search for unintentionally misleading listings, buy the items and then strike up a conversation with the apologetic sellers. It's certainly one way to experience more social interaction, but as always, you may feel this is rather too drastic.

COLLECTOR'S CORNER

READERS TAKE US THROUGH **THE RETRO KEYHOLE**

FAIRCHILD CHANNEL F
"A more obscure console, I love it because of its history. First console with a microprocessor, and first to use carts."
PAID: €150

KNIGHT LORE
Chris is a big fan of the isometric adventure game. "My favourite game. Maximum nostalgia!" he smiles.
PAID: €10

BIO

NAME:
Chris McCallum

LOCATION:
Ireland

FAVOURITE GAME:
Knight Lore

FAVOURITE SYSTEM:
ZX Spectrum

ESTIMATED VALUE:
€23,000

RETRO LOBBYIST

This months retro handyman has a games room with a twist

This month's collector is Chris McCallum, born in Edinburgh and now retro collecting from the Emerald Isle. The highlight of Chris' collection is not a particular item, but a certain area in which his collection resides. Confused? We'll explain more in a bit. "I started to pick up a few consoles and computers in the late Nineties when I was still living with my parents," starts Chris, who has an impressive 22,000 followers on Instagram alone. "And I got some great pickups such as boxed ZX81s and Atari Lynx." As with many of us, life took over, however, and when it was time to leave the family home, the fledgling collection had to go.

Having grown up in the Eighties, Chris retains a love for the ZX Spectrum, his first ever gaming machine. "But I love all games and formats, to be honest. Some other favourites would be *Turtles In Time* on the Super Nintendo, *Sega Rally* for the Saturn and *Super Breakout* on the Atari 2600." Chris' wide variety in gaming taste reflects his collecting habits. There's no focus on a complete collection for a particular system, just the thrilling search for retro goodies. "I love the hunt," he grins, "and literally pick up what I can. I love music, listening and creating, so I pick up some amazing retro audio equipment. Keyboards, MiniDisc recorders, tape players. I even found a Korg Vocoder once. I never know what I'll find."

Today, uncovering retro treasure at thrift stores and car boots is getting harder all the time. Yet Chris is living proof that it can still produce dividends. "The key is to get up early," he grins, "and coffee. You have to do the grind, some weeks nothing, then you get really good weeks. And dig. Look everywhere. It's amazing what can be found." But we'll keep you in suspense no longer. Having established an already-impressive games room, Chris' mind turned to the hallway that feeds into his retro den. "A flooring company approached me for some flooring for the game room," he explains. "The thought of stripping the room alone was giving me nightmares. So I thought, let's do a really cool entrance to the room, and went to work." Being a dab hand at DIY, Chris created the lobby himself. "I stripped the area back, filled and sanded walls, painted, installed new lights, new units and the amazing high gloss Marvel floor." It took him weeks four weeks, and now he can showcase a unique entrance that has as much character and love as the main games room itself.

Along with select items from his collection, Chris regularly posts pictures of his gaming lobby and more. Any tips for securing a legion of fans such as he has? "Just engage with your followers and be yourself," he says, "plus always reply to questions and comments, and get a shot that looks good. Most importantly – keep it fun!" Wise words indeed Chris. ✱

ATARI XL
"Found in an electrical recycling yard, no connectors or anything. Randomly found a power supply for it a car boot sale years later, and it works!"
PAID: €1*

*For the power supply

Got an impressive collection of your own? Contact us at:
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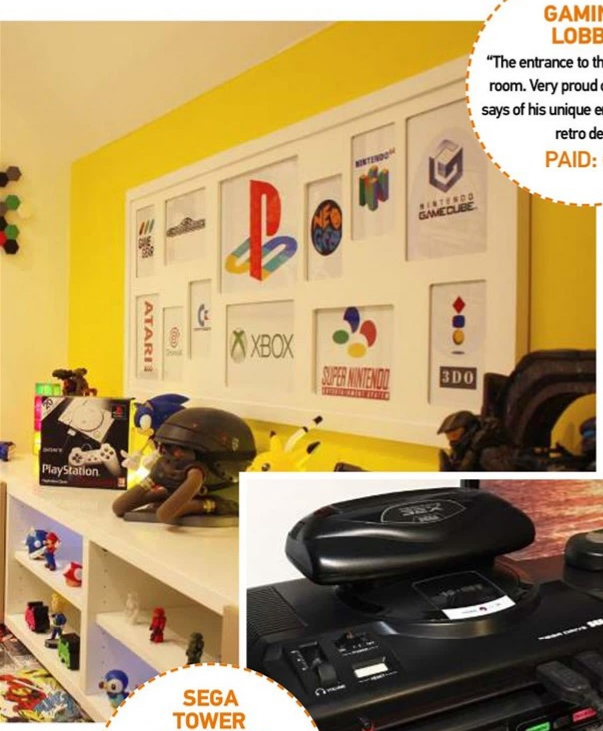

GAMING LOBBY
"The entrance to the retro game room. Very proud of this," Chris says of his unique entryway to his retro den.
PAID: €0

SEGA TOWER OF POWER
"The Mega Drive/Mega CD/32X combo. Such a Frankenstein of a machine!" Chris says, and we're inclined to agree.
PAID: €250

JEWEL IN THE CROWN

VECTREX

■ "Such a cool and fun machine to play. This was a €200 eBay purchase." As fans of the system ourselves, it's no surprise to see this ia the most precious object in Chris' collection. **PAID: €200**

BARGAIN HUNT

Your guide to the rising world of retro prices

THE COVER STAR YOSHI'S ISLAND

This late release for the SNES does not come cheap. The player's choice edition in the red box can fetch over **£60** while the standard version of the game goes for around **£40** or **£700** for a factory-sealed copy. Alternatively you can just get a Japanese copy for the game for around the **£15** mark.

HEAD OVER HEELS

Interest in Jon Ritman and Bernie Drummond's classic game is certainly rising. We've seen an Erbe variation of the ZX Spectrum version sell for over **£60**, while the standard big box version is around **£30**. The C64 disc version can earn you as much as **£25**, while the Atari 8-bit version costs around a tenner. The Amiga and Atari ST versions can be picked up for just over a fiver.

LASER SCOPE

If you're desperate to play the likes of Duck Hunt with Konami's peripheral you'll be looking at spending a minimum of **£65** for the privilege.

SKITCHIN'

Despite being a Mega Drive exclusive, Electronic Arts' skateboarding game is surprisingly cheap, with a complete copy rarely costing more than **£12**.

TENCHU: STEALTH ASSASSINS

Another moderately-priced game to look out for. The Pal version won't cost more than **£10**, while the US alternative is roughly double that price.

HYPER DUEL

We've seen complete versions of Technosoft's shooter sell for as much as **£550**. Even a used copy with no spine will cost a minimum of **£300**!

BBC MICRO

Acorn's most popular 8-bit computer is starting to go for good money, with unboxed versions selling for between **£60** and **£110**. Boxed copies can fetch close to **£300**.

HOW MUCH?!

MIKE CLARKE'S AMIGA

The ex-Psygnosis staffer had a bit of a clear out recently, selling numerous items, including his Amiga 3000. His Amiga 1200 was even more popular, eventually selling for **£565.55**. Wow!

Prices correct at time of print

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STAR LETTER

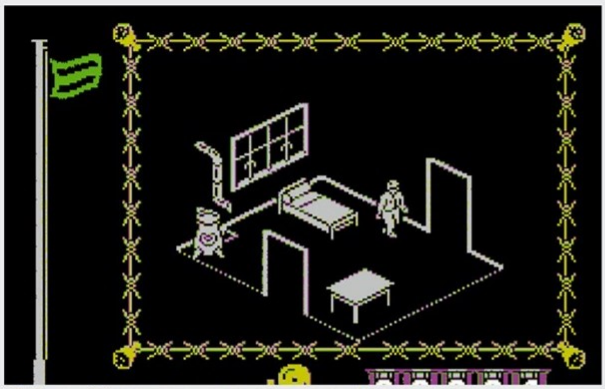
BUG SQUASHER

Dear **Retro Gamer**,
One feature I would like to see periodically in **Retro Gamer** magazine is a 'Bug Report' section, a column about bugs which had the potential to ruin otherwise fantastic games.

My contribution is for Ocean's *The Great Escape*. One mission involved giving an item to a fellow prisoner at roll call so he could case a diversion while the player attempted to escape. However, every time I tried this, the game froze and had to be reloaded!

Whether this was just a faulty copy I had or was a more widespread problem I do not know, but I found it was a rather annoying problem in an otherwise excellent title.
Yours faithfully,
D O'Conner

That's a really good idea. Darran always used to get annoyed with constantly dying over and over again in *Jet Set Willy* if you entered certain screens in a specific way, so it's an idea that definitely has some legs. Have a prize while we think about the best way to put your idea into these hallowed pages.



» [ZX Spectrum] Did you have any games ruined by annoying bugs? Write in and let us know.

» [Xbox] We'd argue *Silent Hill 2* is not only the best game in the series, but one of the best survival horrors full-stop.

» [ZX Spectrum] P Hardy, you're in luck. Graeme Mason loves *2000 AD* so we're sure he'll put an article together.

HOLY DROK!

Dear **Retro Gamer**,
I am a relative newcomer to the mag, and this is the first time I have written in, but I must compliment the **RG** team on such an excellent magazine!

Secondly I have a question, and apologies if this has already been done in earlier issues. Could you possibly run an article on all the games produced featuring characters from *2000 AD*, a comic I loved in my youth?

I know there have been several games based on the iconic lawman Judge Dredd, while Rebellion also created a *Rogue Trooper* game. I also vaguely remember a sideways scrolling shooter about Strontium Dog on some obscure C64 compilation, too.

Any insight would be most helpful.
Thanks and yours faithfully,
P Hardy

You're right, there have been a fair few games based on *2000AD* comics. We'll do a little digging around, find a suitable freelancer and see if Rebellion is up for a chat, as it now owns the licence to these games along with the actual comic.

SILENT IS GOLDEN

Dear Darran,
Your recent issue that examined *Resident Evil 2* really brought back some memories and was great. My favourite videogame of all time is *Silent Hill 2*. Is there any chance you would be looking to do a main lead feature in the near future examining this pivotal game? If you have already done so, please let me know what issue it was but I do think it deserves its own cover.
Best wishes,
Duncan Bunce

You've got great taste in games Duncan. *Silent Hill 2* is a game we'd love to cover in more detail, but the members of Team Silent have scattered to the four winds. There's a possibility of us doing an Ultimate Guide though, so we're sure we can do something. In the meantime, check out our two-page Making Of with Masahiro Ito in issue 108.

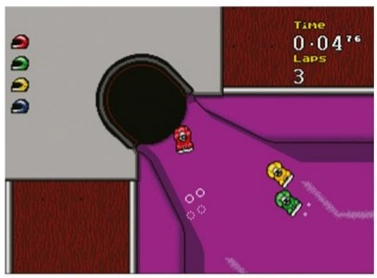
JUST BURSTING

Dear **Retro Gamer** Team,
I love collecting games. It's a hobby of mine. I'm currently attending secondary school and (somehow) get some time to play games. I would like to know if you could suggest a good game to play in 15-30 minute bursts. Preferably, a game for the Mega Drive or the GameCube, but any genre would do. Also, keep up the amazing subscriber exclusive covers!
Yours sincerely,
Cayden L

Glad to hear you like the subscriber covers. If you're looking for a thrill ride, we think you should try *Micro Machines 2: Turbo Tournament*. You can race around each track in a few minutes and it offers plenty of replay value with friends.

PINBALL HEAVEN

Dear **Retro Gamer**,
Please, could you run an article on pinball games in the future? I'm a huge



» [Mega Drive] *Micro Machines 2*, a game that's perfect for short blasts of gaming. It's still quite cheap, too.

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fan of games like *Devil Crash*, *Pinball Fantasies* and the releases by Zen Studios, and it would be fantastic to see more coverage about them in the magazine. For me, pinball games are just as important as the arcade games I loved playing as a kid as they would often exist side by side. Don't cover *Advanced Pinball Simulator*, though, as I didn't like it.

Yours hopefully,
James Binns

Darran plays *Pinball FX 3* more than any other game on his Switch, so he's certainly up for more coverage. We ran an article about videogame pinball in issue 157, and there's been a making of *Pinball Dreams* in issue 26.

IT'S NOT THAT BAD

Hello **Retro Gamer**,

In addition to a proper Mega Drive I also own the cheaper AtGames version with wired controllers (which are excellent considering the price).

It's an odd machine that has its problems, mainly affecting the *Sonic* games (*Sonic 2*'s special stage is completely ruined), *but* there is a wealth of other titles on the system that play well and are absolutely nowhere near as bad as online, hyperbolic reviews suggest. It pains me to keep hearing bad reviews.

I am not a collector, but consider myself to be more than a casual gamer and I have been staying up at night later than I should playing the AtGames Mega Drive. Not bad for a product that YouTubers and the like feverishly warn others to "DO NOT BUY", eh?
Robert Mcmillan

While you're right that many of the games are perfectly enjoyable, it is worth noting that devices like the SNES Mini have raised the bar significantly. Even Sega has changed direction with its incoming Mega Drive Mini, and the lukewarm reception of the PlayStation Classic has highlighted just how much companies need to up their game.

» [Switch] Darran is obsessed with *Pinball FX3* and has every single table that's currently available.

DISCUSSED THIS MONTH

Darran's PVM

There's been lots of drama for Darran this month. It took him two weeks to decide whether he should pick up a nearby Sony Trinitron PVM, and when he finally purchased it, he couldn't stop going on about its scanlines. Tragedy stuck at the end of February, though, as it made its way to the PVM junkyard in the sky.

» Robert enjoys his AtGames Mega Drive, but he advises you don't play *Sonic 2* on it.

Your say

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

What's your favourite Ocean Software game?

Peter Leigh
Batman: The Movie captured the essence of the 1989 film so well. The Speccy 128k music is also mind-tingling good.

Alix Bergeret
It's very tricky to pick just the one, but I would go for *Beach Volley* on the Amiga, because it's great multiplayer fun, and I spent countless hours on it.

Adam Jones
Midnight Resistance. I spent so many hours on the Amiga on this game alone. It was fun with just the right level of challenge to me!

Lee Collins
Batman for me. It was a great 3D puzzle game.

Dave Adamson
Hudson Hawk or the isometric *Batman* game. Both were excellent and occupied hours of my time in single sessions.

Kevin McDonald
Jurassic Park on the SNES. A good mix of FPS and top-down action, with some memorable music.

Big Shoes
Batman on the Amiga, what a game! Played that so many times and still play it now.

Antiriad2097
I have to say *Hunchback* on the Oric, Its full of happy memories and is one of the first games I mastered, looping it round several times.

» Well done, Kevin McDonald. You've enabled Darran to sneak an image of *Jurassic Park* into the mag.

Merman
The *Magnificent 7* on C64, not only does it contain *Wizball* (one of my all-time favourites) but it also has *Head Over Heels* and the sublime *Frankie Goes To Hollywood*. Great value at the time.

Lee Ackerley
I have fond memories of *Navy Seals* on the Atari ST, as the theme tune has always stuck in my head. I remember seeing the film on telly one night when I was a kid then finding out there was a game!

Rick Hynes
Pugsley's Scavenger Hunt! One of the best and most creative 2D platformers ever made.

retro GAMER

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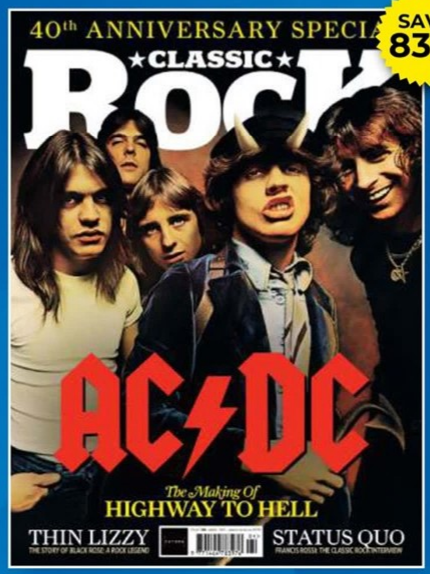

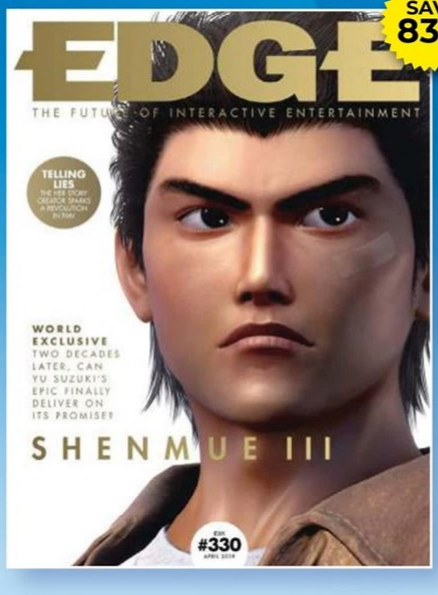

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Snake, there's an exciting bluffer's guide to stealth games in the next issue. It might be of some use to you...

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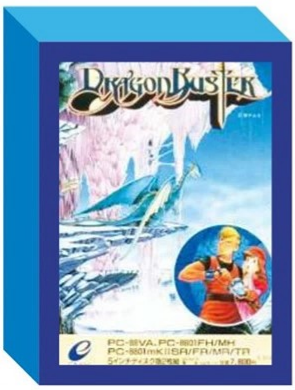


DRAGON BUSTER

» Namco's arcade game might look prettier than this NEC PC-8801 conversion, but Enix went the extra mile when bringing it to the home platform. As well as adding a new introduction sequence, a fully illustrated ending was added to replace the arcade game's sprite-based celebration, in which various Princess Celias show up to give the hero a big kiss. Let's take a look and see how Enix decided to do things...

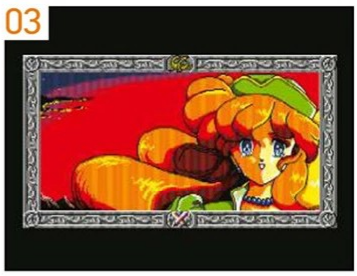
01

» A blood-covered sword lies on the ground, in front of a man whose knees look like they may buckle at any moment. There's no room for misinterpretation – this is the aftermath of a titanic struggle, where lives were at risk.

02

» Thankfully, our hero Clovis (yes, like the cat from Stephen King's *Sleepwalkers*) seems to be okay. He's definitely taken a beating and his arm's looking a bit worse for wear, with a large cut by his shoulder, but he'll survive.

03



» Princess Celia, complete with the kind of voluminous hair possessed only by the women of Eighties anime, has tears in her eyes. Not only has she been rescued from the dragon's captivity, but her beloved Clovis is alive. Her plan worked.

04

» Closing her eyes, Celia tells him that she got herself kidnapped on purpose, and per the Damsels In Distress Act 1533, he's now required to deliver the kiss that all princesses receive upon rescue. Clovis stares at her incredulously. "My arm's hanging by a thread. Could I maybe go see the medic first?"

05

» Celia begrudgingly agrees to his request on the promise that he'll deliver later, holding his good hand as they begin the long walk back to the castle. "But only because it'd be illegal not to," declares Clovis. "Mad people who abuse the law and nearly get me killed, just for a kiss? Not my type."

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